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INSTRUCTIONAL MATERIALS

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Vocational Agriculture Service

College of Agriculture
University of Illinois
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Instructional materials in Agriculture listed in this catalog have been developed primarily for use in high schools, junior and community colleges, and universities.

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Vocational Agriculture Service provides equal opportunities for programs and employment.

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DESCRIPTION OF INSTRUCTIONAL MATERIALS

Subject-Matter Units

Units cover a particular subject and are designed for use as a text by every student in the class. They are 8 1/2" by 11" in size and punched for three-ring notebook.

Slidefilms

Slidefilms are single-frame, 35mm color films used on a standard filmstrip projector. Some text material is generally shown on each frame so that a separate script may be unnecessary. However, most slidefilms are accompanied by a study guide or script that is included in the slidefilm price. Cassette tapes narrating study guide text are listed when available for the slidefilms.

Slide Sets

Standard 2" x 2" color slides usually include material identical to the slidefilm of the same title and number. Slide sets may have an accompanying study guide which is included in the slide set price. Cassette tapes narrating study guide text are listed for slide sets when available.

Transparencies

These are 8 1/2" x 11" instructional illustrations printed on clear plastic for overhead projection. Each transparency is accompanied either by a printed paper copy, usually with some text on the back, or by a study guide with text. Some transparencies have cassette tapes for narration. Each set is packaged in a manila pocket folder with the title of the set stamped on the tab.

Study Guides

Study guides are 8 1/2" x 11" printed booklets that may accompany slidefilms, slide sets, or transparency sets of the same title and number. They include reduced-size black and white picture frames adjacent to the narration or script for the frame. Study guides are used for narration, to review the presentation, and for independent study. They may be purchased separately, but are included in the price of slidefilms, slide sets, and transparency sets and are listed with accompanying visuals when available.

Cassette Tapes

Cassette tapes fit a standard cassette tape player and are used to narrate slidefilms, slide sets, or transparency sets of the same title and number. The information in the cassette is the same as contained in the study guide or script.

Color Photo Sheets and Booklets

Color photo sheets, 8 1/2" x 11", consist of detailed close-up pictures on one side and concise descriptions on the reverse side. Weed Plants, Crop Plants, Horticulture Plant Diseases, and Field Crop Plant Diseases are booklets with photo sheets, 8 1/2" x 11", spiral bound.

Diseases of Soybeans and Corn, Insect Pest Identification of Corn, Soybeans, and Alfalfa are pocket sized spiral-bound booklets. These informative color booklets are useful for identification purposes in the classroom or in the field.

Color Flash Cards

Flash cards have color photographs on one side and identification and a brief description on the reverse side. Cards may be used for individual or classroom instruction.

Oxyacetylene Series

This series consists of 12 slidefilms, or 12 slide sets on oxyacetylene processes. Individual slidefilms or slide sets may be purchased with or without cassettes. By combining the 12 tape recordings on 6 cassettes, a complete set is offered at considerable savings. The slidefilm set only is packaged in an attractive storage box.

Please write or call for further information

VOCATIONAL AGRICULTURE SERVICE
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Telephone: 217/333-3871

BEEF CATTLE

Subject-Matter Units, Test Questions, Teacher's Keys

U1010b	Managing the Beef Cow Herd, 16p	$ 1.05
Q1010b	Test Questions, pkg. of 10	1.50
K1010b	Teacher's Key for Q1010b	.55
U1054	Health Problems with the Beef Cow Herd, 12p	.80
U1056	The Beef Breeding Enterprise, 8p	.50
Q1056	Test Questions, pkg. of 10	1.50
K1056	Teacher's Key for Q1056	.55
U1057	The Feeder Cattle Enterprise, 8p	.50
Q1057	Test Questions, pkg. of 10	1.50
K1057	Teacher's Key for Q1057	.55

Slidefilms, Slide Sets, Study Guides

Selecting Beef Breeding Animals

This 75-frame slidefilm illustrates and discusses the factors that should be considered when selecting beef breeding animals.

F100a	Slidefilm, 75 fr.	$ 17.25

Breeds of Beef Cattle

This 26-frame slide set (or slidefilm) illustrates and describes the following eight breeds of beef cattle: Aberdeen Angus, Red Angus, Hereford, Polled Hereford, Shorthorn, Polled Shorthorn, Red Poll, and Charolais.

F102	Slidefilm, 26 fr.	$ 6.00
S102	Slide Set, 26 fr.	10.40

New and Exotic Breeds of Beef Cattle

This 64-frame slide set (or slidefilm) illustrates and describes twenty new and exotic breeds of beef cattle.

F104	Slidefilm, 64 fr.	$ 14.70
S104	Slide Set, 64 fr.	25.60

Aberdeen Angus Judging Classes, Part I

This 33-frame slide set (or slidefilm) includes one ring each of Angus bulls and heifers. Three views of each animal are presented as well as group pictures along with placings and official reasons.

F103-1.1	Slidefilm, 33 fr.	$ 7.60
S103-1.1	Slide Set, 33 fr.	13.20

Aberdeen Angus Judging Classes, Part II

This 31-frame slide set (or slidefilm) includes one ring each of yearling heifers and crossbred steers. Two views of each animal are presented as well as group pictures along with placings and official reasons.

F103-1.2	Slidefilm, 31 fr.	$ 7.15
S103-1.2	Slide Set, 31 fr.	12.40

Additional Judging Materials on page 48.

Livestock Judging Videotape Series on page 49.

Additional study guides are available at a cost of $1.50 each.

Judging Yearling Beef Heifers

This 38-frame slide set (or slidefilm) provides two classes of yearling beef heifers for evaluation. Each class shows three views of the animals. One possible placing, sample reasons, and cuts are included for each class.

F106	Slidefilm, 38 fr.	$ 8.75
S106	Slide Set, 38 fr.	15.20

Hereford Judging Classes: Yearling Bulls and Yearling Heifers

This 31 frame slide set (or slidefilm) includes one ring each of Hereford yearling bulls and Hereford yearling heifers. Two views of each animal are presented as well as group pictures along with placings and official reasons.

F103-2.1	Slidefilm, 31 fr.	$ 7.15
S103-2.1	Slide Set, 31 fr.	12.40

Cattle Handling Facilities

This 38-frame slide set (or slidefilm) illustrates and describes cattle handling facilities such as corrals, working chutes, and blocking gates.

F187	Slidefilm, 38 fr., with study guide	$ 10.25
S187	Slide Set, 38 fr., with study guide	16.70

Transparencies

Cattle Transparencies

This is a set of 63 overhead transparencies printed in colored ink on clear plastic. It includes many different aspects of beef cattle production. Also included is a white paper copy of each frame with text on the back.

T100	Transparency Set, 63 fr.	$ 28.65

BREEDING AND SELECTION

Subject-Matter Units, Test Questions, Teacher's Keys

U1002c	Artificially Inseminating Livestock, 16p	$ 1.05
U1009a	Improving Animals Through Breeding, 16p	1.05
Q1009a	Test Questions, pkg. of 10	1.50
K1009a	Teacher's Key for Q1009a	.55
U1019a	Judging Livestock, 20p	1.30
Q1019a	Test Questions, pkg. of 10	1.50
K1019a	Teacher's Key for Q1019a	.55
U1061	Using Livestock Production Records, 12p	.80

GOOD SEMEN

Transparencies, Study Guides

Animal Genetics and Breeding Transparencies

This is a revised set of 47 overhead transparencies printed on clear plastic. This material covers such topics as cell division, reproductive tract anatomy, breeding systems, and gestation. A study guide and a white paper copy of each frame is included.

NEW ——— T130a Transparency Set, 47 fr., with study guide $ 22.95

*Cassette Tapes of study guides are available at an additional cost of $3.85.

DAIRY CATTLE

Subject-Matter Units, Test Questions, Teacher's Keys

U1020b	Feeding Dairy Cattle, 16p	$ 1.05
U1022	Raising Dairy Heifers and Bulls, 8p	.50
U1025	The Cow's Udder and How It Functions, 12p	.80
U1046	Dairy Cattle Breeds, 12p	.80
Q1046	Test Questions, pkg. of 10	1.50
K1046	Teacher's Key for Q1046	.55

Slidefilms, Slide Sets

Breeds of Dairy Cattle

This 38-frame slide set (or slidefilm) illustrates and discusses six breeds of dairy cattle: Ayrshire, Brown Swiss, Guernsey, Holstein, Jersey, and Milking Shorthorn.

F210	Slidefilm, 38 fr.	$ 8.75
S210	Slide Set, 38 fr.	15.20

Holstein Judging Classes

This 32-frame slide set (or slidefilm) includes two rings of mature Holstein cows. Two views of each animal are presented as well as group pictures along with placings and official reasons.

F211-1.1	Slidefilm, 32 fr.	$ 7.35
S211-1.1	Slide Set, 32 fr.	12.80

Guernsey Judging Classes

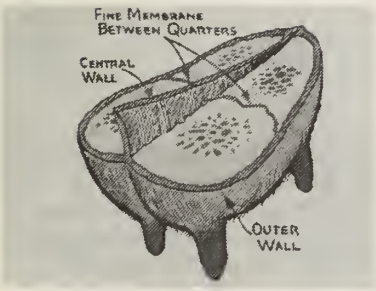
This 32-frame slide set (or slidefilm) includes two rings of Guernsey cows. Two views of each animal are presented as well as group pictures along with placings and official reasons.

F211-2.1	Slidefilm, 32 fr.	$ 7.35
S211-2.1	Slide Set, 32 fr.	12.80

Selecting Dairy Cattle

This 61-frame slide set (or slidefilm) illustrates in detail and discusses how to select dairy cows and heifers based on type, production records, and production pedigrees. It also illustrates and describes desirable breed characteristics for Ayrshire, Brown Swiss, Guernsey, Holstein, and Jersey Breeds.

F207a	Slidefilm, 61 fr.	$ 14.05
S207a	Slide Set, 61 fr.	24.40



The Cow's Udder and How It Functions

This 48-frame slidefilm illustrates and explains the functions of the various parts of the cow's udder. It also explains how the cow "lets down" her milk and what happens to milk "let down" when a cow is frightened or injured.

F208a	Slidefilm, 48 fr.	$ 11.05

Clipping and Trimming Dairy Cattle

This 34-frame slidefilm illustrates and discusses the step-by-step procedure involved in clipping dairy cattle.

F209	Slidefilm, 34 fr.	$ 7.80

Additional study guides are available at a cost of $1.50 each.

FEEDS AND FEEDING

Subject-Matter Units, Test Questions, Teacher's Keys

U1013a	General Facts on Livestock Feeding, 8p	$ .50
Q1013a	Test Questions, pkg. of 10	1.50
K1013a	Teacher's Key for Q1013a	.55
U1063	Feed Additives and Hormone Implants in Animal Agriculture, 32p	2.10

Transparencies

Animal Nutrition Transparencies

This is a set of 72 transparencies with study guide covering ruminant and nonruminant digestive systems, the "feed groups," nutrient requirements of livestock, how to formulate a ration, sample rations for beef, swine, sheep, and horses, and other topics. This is one of the most complete sets of transparencies available on animal nutrition.

T131	Transparency Set, 72 fr., with study guide	$ 34.20

HORSES

Subject-Matter Units, Test Questions, Teacher's Keys

U1041	Caring for the Brood Mare and Foal, 8p	$ .50
Q1041	Test Questions, pkg. of 10	1.50
K1041	Teacher's Key for Q1041	.55
U1047	Horses and Horsemanship, 44p	2.85
Q1047	Test Questions, pkg. of 10	1.50
K1047	Teacher's Key for Q1047	.55

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Good Horsemanship

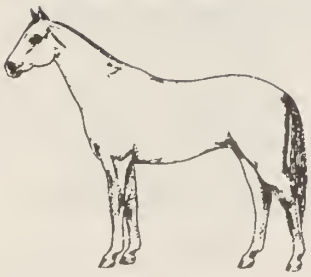
This 43-frame slide set (or slidefilm) illustrates and describes various points to check before mounting the horse, how to mount properly, best positions for the hands and feet, and the proper rider position in the saddle for various gaits.

F150	Slidefilm, 43 fr.	$ 9.90
S150	Slide Set, 43 fr.	17.20

Preparing the Horse for Riding

This 52-frame slide set (or slidefilm) illustrates and describes proper clipping, grooming, checking the feet and shoes, and checking and adjusting riding equipment.

F151	Slidefilm, 52 fr.	$ 11.95
S151	Slide Set, 52 fr.	20.80



Horse Feeding and Nutrition

This 79-frame slide set (or slidefilm) with study guide illustrates many of the common factors that should be considered in good horse nutrition. Techniques for developing a proper horse feeding program are stressed and are based on common sense applications of nutritional needs. Topics discussed include the nonruminant digestive system, nutrient requirements and their sources, specific feeding techniques, suggested life stage feed rations, and the various grains and hays used as horse feed. Techniques for monitoring potential health problems and using protein supplements are also included.

F152	Slidefilm, 79 fr., with study guide*	$ 19.65
S152	Slide Set, 79 fr., with study guide*	33.10

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Transparencies

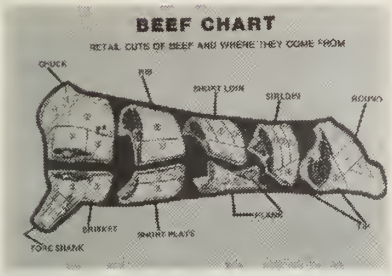
Horse Transparencies

This is a set of 40 overhead transparencies printed in colored ink on clear plastic. It includes many different aspects of caring for horses. Also included is a white paper copy of each frame with text on the back.

T150	Transparency Set, 40 fr.	$ 18.30

MEATS

Slidefilms, Slide Sets, Study Guides, Cassette Tapes



Complete Series on Meat Identification

These slidefilms or slide sets identify and discuss wholesale cuts for beef, pork and lamb, and how to determine whether a given piece of meat is beef, pork, veal, or lamb. They also identify and discuss the retail cuts for beef, pork, and lamb.

SLIDEFILMS		
F180-1	Identification of Retail Meat Cuts, 110 fr.	$ 25.30
F181a	Identification of Kinds of Meat, 33 fr.	7.60
F182a	Identification of Pork Cuts, 81 fr.	18.65
F183a	Identification of Beef Cuts, 96 fr.	22.10
F185a	Identification of Lamb Cuts, 47 fr.	10.80
SLIDE SETS		
S180-1	Identification of Retail Meat Cuts, 110 fr.	$ 44.00
S181a	Identification of Kinds of Meat, 33 fr.	13.20
S182a	Identification of Pork Cuts, 81 fr.	32.40
S183a	Identification of Beef Cuts, 96 fr.	38.40
S185a	Identification of Lamb Cuts, 47 fr.	18.80

Special series price

MF180-1	Meat Identification Series (5 slidefilms)	$ 58.20
MS180-1	Meat Identification Series (5 slide sets)	96.90

Beef Slaughtering

This 81-frame slide set (or slidefilm) with study guide pictorially shows and describes the beef slaughtering process as taught at the University of Illinois Meat Science Laboratory. All aspects of the slaughtering process are illustrated from the time the animal is unloaded from the truck until the dressed carcass is rolled into a cooler.

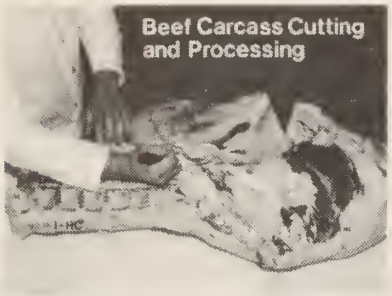
F261	Slidefilm, 81 fr., with study guide*	$ 20.15
S261	Slide Set, 81 fr., with study guide*	33.90

Pork Slaughtering

This 75-frame slide set (or slidefilm) with study guide pictorially shows and describes the pork slaughtering process as taught at the University of Illinois Meat Science Laboratory. All aspects of the slaughtering process are illustrated from the time the animal is unloaded from the truck until the dressed carcass is rolled into a cooler.

F263	Slidefilm, 75 fr., with study guide*	$ 18.75
S263	Slide Set, 75 fr., with study guide*	31.50

Additional study guides are available at a cost of $1.50 each.



Beef Carcass Cutting and Processing

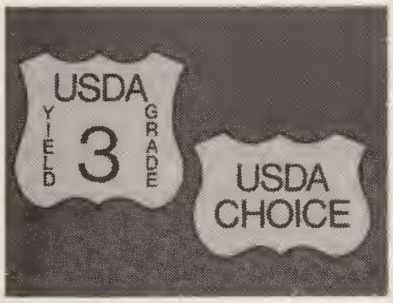
This 75-frame slide set (or slidefilm) with study guide pictorially shows and describes the complete fabrication process of a beef carcass beginning with the chilled carcass and resulting in the common retail cuts of beef. Detailed photographs show the fabrication of each cut.

F262	Slidefilm, 75 fr., with study guide*	$ 18.75
S262	Slide Set, 75 fr., with study guide*	31.50

Pork Carcass Cutting and Processing, Part I and Part II

These two slide sets (or slidefilms) with study guides pictorially show and describe the complete fabrication process of a pork carcass. Part I (97 frames) begins with the chilled carcass and shows the step-by-step procedure resulting in retail pork cuts. Part II (64 frames) shows and describes how to cure and smoke pork.

F264-1	Slidefilm, 97 fr., with study guide*	$ 23.80
F264-2	Slidefilm, 64 fr., with study guide*	16.20
S264-1	Slide Set, 97 fr., with study guide*	40.30
S264-2	Slide Set, 64 fr., with study guide*	27.10



Quality and Yield Grading of Beef Carcasses

This 80-frame slide set (or slidefilm) with study guide illustrates, through the use of photographs, drawings, and charts, the detailed step-by-step procedure used when quality grading and yield grading beef carcasses. Each step is well illustrated and described in easy to understand terms.

F260	Slidefilm, 80 fr., with study guide*	$ 19.90
S260	Slide Set, 80 fr., with study guide*	33.50

Meat Evaluation Classes, Part I: Beef

This 100-frame slide set (or slidefilm) with study guide illustrates through photographs and discussion, the following rings: beef carcasses (head-on, side, and internal views), ribeyes, pelvic and kidney area, chucks (arm-end, blade-end, top view), ribs (loin end, blade-end, top views) loins (rib-end, sirloin-end, top views), and rounds (sirloin-end, top view, rear view). This is a good introductory presentation of what to look for when evaluating beef on the rail.

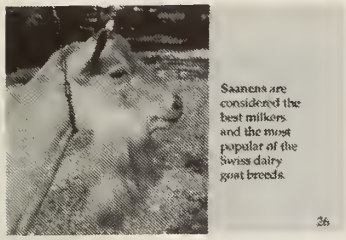
F270-1	Slidefilm, 100 fr., with study guide*	$ 24.50
S270-1	Slide Set, 100 fr., with study guide*	41.50

Meat Evaluation Classes, Part II: Pork & Lamb

This 85-frame slide set (or slidefilm) with study guide illustrates through photographs and discussion, the following rings: pork carcasses (side, head-on, loin-eye views), hams (butt-face, top, back views), lamb carcasses (head-on, side, rib-cage, internal, rib eye views). This is a good introductory presentation of what to look for when evaluating pork and lamb on the rail.

F270-2	Slidefilm, 85 fr., with study guide*	$ 21.05
S270-2	Slide Set, 85 fr., with study guide*	35.50

*Cassette Tapes of study guides are available at an additional cost of $3.85.



GOATS

NEW

Slidefilm, Slide Set, Study Guide

Breeds of Goats

This 48 frame slide set (or slidefilm) discusses the origins and characteristics of Angora goats, 6 breeds of Dairy goats, and Pygmy goats. A study guide is included.

F220	Slidefilm, 48 fr., w/study guide	$ 12.55
S220	Slide Set, 48 fr., w/study guide	20.70

SHEEP

Subject-Matter Units

U1031a	The Sheep Enterprise, 4p	$ .25
U1044	Blocking and Trimming Sheep, 8p	.50
U1060	Feeding & Managing Sheep & Lambs, 16p	1.05

Slidefilms, Slide Sets, Study Guides

Selecting Breeding Sheep

This 72-frame slidefilm illustrates and describes the parts of a sheep, desirable physical characteristics, and selection procedures based on production ability.

F143a	Slidefilm, 72 fr.	$ 16.55

Breeds of Sheep

This 72-frame slide set (or slidefilm) with study guide shows color pictures of 22 breeds of sheep. Information on origin, breed development, and breed characteristics are given for each breed.

F145a	Slidefilm, 71 fr., with study guide	$ 17.85
S145a	Slide Set, 71 fr., with study guide	29.90

Hampshire Sheep Judging Classes: Part I

This 36-frame slide set (or slidefilm) presents one ring each of Hampshire yearling ewes and ewe lambs. Three views of each animal are shown as well as group pictures along with placings and official reasons.

F146-1.1	Slidefilm, 36 fr.	$ 8.30
S146-1.1	Slide Set, 36 fr.	14.40

Hampshire Sheep Judging Classes: Part II

This 35-frame slide set (or slidefilm) presents two rings of market lambs. Three views of each animal are shown as well as group pictures along with placings and official reasons.

F146-1.2	Slidefilm, 35 fr.	$ 8.05
S146-1.2	Slide Set, 35 fr.	14.00

Special series price

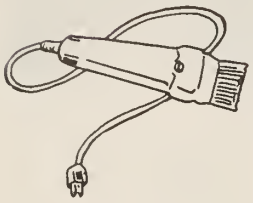
MF145	Sheep Series (4 slidefilms)	$ 35.20
MS145	Sheep Series (3 slide sets, 143a not included)	38.92

Additional study guides are available at a cost of $1.50 each.

Shearing Sheep

This 73-frame slidefilm illustrates and describes the step-by-step procedure of shearing sheep.

F141a	Slidefilm, 73fr.	$ 16.80



Blocking and Trimming Sheep

This 42-frame slidefilm illustrates the equipment needed and describes the step-by-step procedure used to block and trim sheep for showing.

F144	Slidefilm, 42 fr.	$ 9.65

Transparencies

Blocking and Trimming Sheep Transparencies

This is a set of 31 overhead transparencies printed in colored ink on clear plastic. It includes illustrations of the proper procedures to use in blocking and trimming sheep. Also included is a white paper copy of each frame with text on the back.

T144	Transparency Set, 31 fr.	$ 14.25

Sheep Transparencies

This is a set of 50 overhead transparencies printed in colored ink on clear plastic. It includes many different aspects of sheep production. Also included is a white paper copy of each frame with text on the back

T140	Transparency Set, 50 fr.	$ 22.80

SMALL ANIMALS AND COMPANION ANIMALS

Subject-Matter Units

U1050	Rabbit Raising, 12p	$ .80
U1052	Caring for the Small Laying Flock, 8p	.50
U1062	Feeding and Care of Dogs, 16p	1.05

Slidefilms, Slide Sets, Study Guides

Breeds of Dogs: Part I and Part II

Two dog breed identification slidefilms (or slide sets) are available. In addition to color photographs, origin, height, weight, and desirable color markings are given for each breed. Part I (76 frames) includes sporting dogs, hounds and terriers. Part II (80 frames) includes working dogs, herding dogs, toy dogs, and nonsporting dogs.

Dalmatian 58

F190-1	Slidefilm, Part I, 76 fr., with study guide	$ 19.00
F190-2	Slidefilm, Part II, 80 fr., with study guide	19.90
S190-1	Slide Set, Part I, 76 fr., with study guide	31.90
S190-2	Slide Set, Part II, 80 fr., with study guide	33.50

Special series price

MF190-1	Breeds of Dogs (Parts I & II)	$ 26.90
MS190-1	Breeds of Dogs (Parts I & II)	43.35

*Cassette Tapes of study guides are available at an additional cost of $3.85.

SWINE

Subject-Matter Units, Test Questions, Teacher's Keys

U1029a	The Swine Enterprise, 8p	$ .50
Q1029a	Test Questions, pkg. of 10	1.50
K1029a	Teacher's Key for Q1029a	.55
U1033b	Selecting and Purchasing Hogs, 8p	.50
Q1033b	Test Questions, pkg. of 10	1.50
K1033b	Teacher's Key for Q1033b	.55
U1034a	Caring for the Swine Herd During Breeding & Gestation, 4p	.25
U1036a	Swine Feeds and Feeding, 16p	1.05
Q1036a	Test Questions, pkg. of 10	1.50
K1036a	Teacher's Key for Q1036a	.55
U1037b	Caring for the Sow & Litter at Farrowing Time, 8p	.50
Q1037b	Test Questions, pkg. of 10	1.50
K1037b	Teacher's Key for Q1037b	.55
U1039a	Systems of Swine Breeding, 8p	.50
U1045a	Breeds of Swine, 12p	.80
U1064	Feed Rations for Swine, 28p	1.80

Slidefilms, Slide Sets

Breeds of Swine

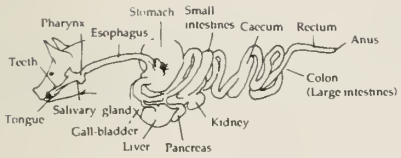
This 52-frame slide set (or slidefilm) illustrates and briefly describes the following nine breeds of swine: Berkshire, Chester White, Duroc, Hampshire, Landrace, Poland China, Spotted Poland China, Tamworth, and Yorkshire.

F164a	Slidefilm, 52 fr.	$ 11.95
S164a	Slide Set, 52 fr.	20.80

Duroc Swine Judging Classes

This 30-frame slide set (or slidefilm) illustrates and describes two rings of Duroc hogs. It presents two views of each animal as well as group pictures along with placings and official reasons.

F171-1.1	Slidefilm, 30 fr.	$ 6.90
S171-1.1	Slide Set, 30 fr.	12.00



Digestion in Swine

This 47-frame slidefilm illustrates the step-by-step digestion process taking place in swine beginning with the mouth and ending with the large intestine.

F170 Slidefilm, 47 fr. $ 10.80

Transparencies, Study Guides

Swine Transparencies

This is a set of 40 overhead transparencies printed in colored ink on clear plastic. It includes many different aspects of swine production. Also included is a white paper copy of each frame with text on the back.

T160 Transparency Set, 40 fr. $ 18.30

Additional study guides are available at a cost of $1.50 each.

Swine Rations

Swine Rations

This is a set of 40 transparencies with study guide covering the major aspects of feeding swine. Included are the basic factors used in formulating rations for different classes of swine, suggested baby pig, growing, finishing, and sow rations, and a step-by-step procedure for balancing rations.

T161	Transparency Set, 40 fr., with study guide	$ 19.80

MISCELLANEOUS

Subject-Matter Units

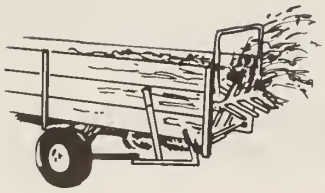
U1026a	Digestion in Animals, 4p	$ .25
U1032	Castrating, Docking & Dehorning, 8p	.50
U1053	Using Rope in Animal Agriculture, 12p	.80
U1058	Animals in World Agriculture, 20p	1.30
U1059	Livestock Waste Management, 20p	1.30
U1070	Marking Animal Sciences Contest Cards, 20p	1.30

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Preventing Transportation Losses of Livestock

This 33-frame slidefilm illustrates and describes, through cartoons, the causes and means of preventing bruises on livestock due to transportation.

F186a	Slidefilm, 33 fr.	$ 7.60



Introduction to Livestock Waste Management

This comprehensive packet of materials includes a discussion of the following topics: livestock waste overview, livestock waste terminology, livestock waste collection and storage, livestock waste field applications, waste handling systems available, and personal safety. The following items are individually available.

F1109	Slidefilm, 83 fr., with study guide*	$ 20.60
S1109	Slide Set, 83 fr., with study guide*	34.70
U1109	Booklet, 24p	1.55
Q1109	Test Questions, pkg. of 10	1.50
K1109	Teacher's Key for Q1109, 8p	.50

Good Animal Waste Management Prevents Pollution

F1103	Slidefilm, 29 fr., with study guide*	$ 8.15

OTHER MATERIALS

Approved Practices

A100	Approved Practices for Beef, 8p	$ .50
A140	Approved Practices for Sheep, 8p	.50
A160	Approved Practices for Swine, 8p	.50
A200	Approved Practices for Dairy, 8p	.50

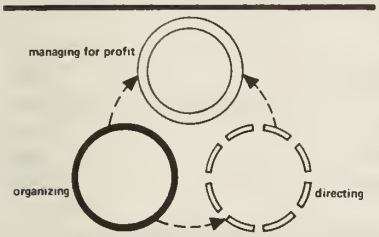
*Cassette Tapes of study guides are available at an additional cost of $3.85.

AGRIBUSINESS MANAGEMENT

Subject-Matter Units

U6004	Agricultural Business Procedures, 32p	$ 2.10
U6006	Simplifying Work in an Agricultural Business, 28p	1.80
U6007	Agricultural Credit Instruments, 12p	.80
U6008	Customer Credit Management in Agricultural Business, 12p	.80
U6009	What Factors Affect Prices of Agricultural Products?, 12p	.80
U6010	Inventory Management & Control, 8p	.50
U6012	Planning to Meet Cash Requirements, 8p	.50
U6014	Common Ways of Organizing a Business, 8p	.50
U6018	Establishing Prices for Meat Animals, 12p	.80

Slidefilms, Slide Sets, Study Guides, Cassette Tapes



Managing for Profit Series

This 6-slidefilm series outlines the major points in managing an agricultural business in a sequential order. F301-1 presents an overview of the management process and discusses the various types of organizational structures. F301-2 identifies management styles and looks at tasks involved in directing the business. F301-3 outlines planning procedures and policies and the steps in planning. F301-4 deals with the management needed to coordinate the activities of the business. F301-5 discusses the communication necessary to motivate employees to achieve business goals. F301-6 explains the principles of control, including delegating of duties, eliminating unneeded reports and paperwork, and evaluating progress toward goal achievement.

F301-1	Organizing the Business, 65 fr., with study guide*	$ 16.45
F301-2	Directing the Business, 40 fr., with study guide*	10.70
F301-3	Planning the Business, 49 fr., with study guide*	12.75
F301-4	Coordination, 51 fr., with study guide*	13.25
F301-5	Communication and Motivation, 58 fr., with study guide*	14.85
F301-6	Business Control, 61 fr., with study guide*	15.55

Special series price — MF301-1 Managing for Profit Series (6 slidefilms)* $ 58.00

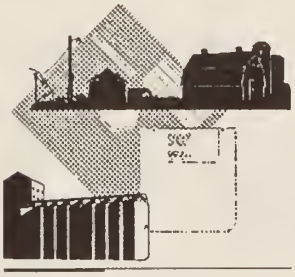
Agribusiness Selling Series

This series of 6 slidefilms outlines the steps necessary to determine a competitive price for products sold by agricultural businesses. F383 outlines the features to consider about the product itself. F384 discusses evaluating the competition for your product. F385 explains customer buying habits, pricing the product, and identifying the market for the product. F386 outlines the basic principles of display, design, and good arrangement when displaying the product. F387 discusses personal and nonpersonal selling, forms of advertising, and elements of an advertisement, including layout, headline, illustration, copy, and signature line. F388 explains how to do a cost analysis for a product and how to decide on a price.

F383	Product Knowledge, 52 fr., with study guide*	$ 13.45
F384	Product Competition, 43 fr., with study guide*	11.40
F385	A Market for Your Product, 44 fr., with study guide*	11.60
F386	Displaying Merchandise, 55 fr., with study guide*	14.15
F387	Advertising Your Product, 74 fr., with study guide*	18.50
F388	Product Cost Analysis/Pricing, 56 fr., with study guide*	14.40

Special series price — MF383 Agribusiness Selling Series (6 slidefilms)* $ 58.00

Additional study guides are available at a cost of $1.50 each.



HUMAN RELATIONS AND SALESMANSHIP

Subject-Matter Units

U6001b	Applying for a Job, 12p	$ .80
U6002	Salesmanship in an Agricultural Business, 24p	1.55
U6003	Human Relations in Agricultural Business, 12p	.80
U6016	Motivating Workers in an Agricultural Business, 8p	.50
U6021	International Agriculture Exchange & Work Opportunities, 16p	1.05
U6026	Marketing Products and Merchandise in Agricultural Businesses, 32p	2.10
U6027	Merchandising Agricultural Products, 32p	2.10
U6028	Career Opportunities in Agricultural Services, 28p	1.80
NEW U6029	**Using Computers in Agriculture, 32p**	**2.10**

This is a new 32-page agribusiness subject-matter unit which will help students start using a computer system. Topics include kinds of computers and their advantages and disadvantages; hardware, software, and types of software; the components of a computer system; and how to select a system and start using it.

NEW U6030	**The Relationship of Sales in Agriculture, 12p**	**.80**
NEW U6031	**Careers in Agricultural Sales, 16p**	**1.05**
NEW U6032	**Agricultural Sales Communications, 8p**	**.50**
NEW U6033	**Steps in Preparing for Ag Sales Call, 10p**	**.80**
NEW U6034	**Conducting an Agricultural Sales Call, 20p**	**1.30**

This Agricultural Salesmanship Series of five new units is a comprehensive coverage of agricultural salesmanship. **U6030** (12p) is an introduction to the world of sales. **U6031** (16p) examines all aspects of sales as a career goal. **U6032** (8p) looks at human behavior as it affects sales and the salesperson's attempt to influence the consumer to buy. **U6033** (12p) considers the all-important task of preparing for a sales call, since only a fraction of the salesperson's time is actually spent with customers. **U6034** (20p) discusses the actual sales call--the culmination of the salesperson's planning and preparation.

Slidefilms

Salesmanship in Agricultural Business

This slidefilm deals with important aspects of selling in agricultural business. Topics include: Some Opportunities in Agricultural Business, The Salesman's Role in Our Economy, Personal Qualities That Are Important, What a Salesman Must Know to Perform His Job, Opening a Sales Interview, Handling Objections Raised by a Prospect, and Closing a Sale.

F391	Slidefilm, 58 fr.	$ 13.35

Human Relations in Agricultural Business

Aspects of human relations in agricultural business are dealt with in this slidefilm, including: Evaluating Personal Appearance, Communicating Properly and Effectively, Personality Characteristics, Proper Etiquette, Getting Along With Others in the Business, and Pleasing the Customer.

F392	Slidefilm, 57 fr.	$ 13.10

COMPUTERS AND COMPUTER SOFTWARE

Subject Matter Units

U6023	Introduction to Computers in Agriculture, 12p	$ .80
U6025	Selecting Agricultural Computer Software, 12p	.80

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Computer Programs

Apple II

CP102	Grain Information Program	$ 86.00
CP103	NUTRI-SWINE	195.00
CP104	Fertilizer Templates, set of 3 (set includes Agricultural Plant Food Automatic Calculator, Turf Fertilization, Greenhouse Fertilizer Program)	125.00
CP105	Agricultural Economic Programs (includes Crop Budget, Grain Price Projection, Feeding Livestock Budget, and Machinery Economic Decisions)	45.00
CP106	Crops and Soils Programs (includes Crop Budget, Fertilizer Cost, Corn Nitrogen, Calibration of Field Sprayers, Grain Price Projection, and Soil Loss)	70.00
CP107	Horticulture Programs (includes Lawn Planning and Greenhouse Heating)	25.00
CP108	Livestock Programs (includes Feeding Livestock Budget, Calf Weaning Weights, Pearson Square Instructions, Pearson Square Calculations, and Random Order of Sale)	60.00
Special series price MCP105	Complete set of CP105, CP106, CP107, CP108	160.00

Tandy/Radio Shack

CP302	Grain Information Programs	111.00
CP304	Fertilizer Templates, set of 3	62.50

IBM

CP405	Agricultural Economics Programs (includes Crop Budget, Grain Price Projection, Feeding Livestock Budget, and Machinery Economic Decisions)	45.00
CP406	Crops and Soils Programs (includes Crop Budget, Fertilizer Cost, Corn Nitrogen, Calibration of Field Sprayers, Grain Price Projection, and Soil Loss	70.00
CP407	Horticulture Programs (includes Lawn Planning and Greenhouse Heating)	25.00
CP408	Livestock Programs (includes Feeding Livestock Budget, Calf Weaning Weights, Pearson Square Instructions, Pearson Square Calculations, and Random Order of Sale)	60.00
Special series price MCP405	Complete set of CP405, CP406, CP407, CP408	160.00
CP409	Supervised Occupational Experience Programs (This program is an excellent complement to subject matter unit U7003. Please note whether you will be using a PC or XT, an AT, or an MS/DOS compatible computer.)	62.50

NOTE: Additional copies of documentation for CP105, CP106, CP107, CP108, CP405, CP406, CP407, CP408, and CP409 are available at a cost of $1.40 each.

MISCELLANEOUS

Subject-Matter Units, Teacher's Keys

U6015	Using Arithmetic in Agriculture, 20p	$ 1.30
K6015	Teacher's Key to U6015	.55
U6017	Using Insurance in the Farm Business, 12p	.80
U6024	Illinois Agriculture and Its Implications in the Economy, 28p	1.80

Additional study guides are available at a cost of $1.50 each.

CREDIT AND FINANCIAL MANAGEMENT

Subject-Matter Units, Test Questions, Teacher's Keys

U2024b	Using Credit to Increase Farm Earnings, 12p	$ .80
U2025b	Determining Credit Needs on the Farm, 12p	.80
Q2025b	Test Questions, pkg. of 10	1.50
K2025b	Teacher's Key for Q2025b	.55
U2026b	Planning for Repayment of Loans, 20p	1.30
U2027b	Sources of Farm Credit, 12p	.80
Q2027b	Test Questions, pkg. of 10	1.50
K2027b	Teacher's Key for Q2027b	.55
U2028b	Factors Involved in the Borrowing Process, 8p	.50
Q2028b	Test Questions, pkg. of 10	1.50
K2028b	Teacher's Key for Q2028b	.55
U2033a	Using Farm Real Estate Loans, 8p	.50

FARM PLANNING

Subject-Matter Units

U2001b	Planning a Profitable Farm Business, 4p	$ .25
U2002b	Inventory Resources for Farm Planning, 12p	.80
U2003b	Planning the Cropping System, 16p	1.05
U2004a	Field Arrangement Principles, 8p	.50
U2006b	Choosing Specific Crops to Grow and Estimating Production, 16p	1.05
U2010b	The Soil Fertility Program--Economic Considerations, 16p	1.05
U2011a	Choosing the Type of Farm, 12p	.80
U2012b	Planning Livestock for the Farm, 12p	.80
U2013a	Planning to Have an Adequate Size of Business, 8p	.50
U2035a	Balancing the Labor Supply and the Farm Business, 12p	.80
U2039a	Fitting Machinery and Equipment to the Farm, 24p	1.55
U2043	Income Possibilities for Your Farm, 20p	1.30

Other Materials

U310	Farm Management Manual, 24p	$ 1.55
Z371	Income Possibilities on Your Farm, 4p. form	.25
U371	Planning Your Farm Business, 36p	2.35
Q371	Problem Illustration for Planning Your Farm Business, pkg. of 10	.80
K371	Key to Problem -- Planning Your Farm Business	.80
Z353-1	Annual Financial Budget and Farm Income Statement, 4p	.25
Q353	Annual Financial Planning Problem, pkg. of 10	.80
Z353-2	Net Worth Statement, 4p. form	.25
Z372	Partial Budget Forms, set of 4	.25
Q372	Partial Budgets & Break-Even Problems, 8p	.50
K372	Key for Q372, 4p	.25

MARKETING AND BUSINESS MANAGEMENT

Subject-Matter Units

U2023a	Marketing Dairy Products, 8p	$ .50
U2040a	Agricultural Business Management--Principles That Affect Production, 24p	1.55
U2044	Calculating the Cost of Producing and Storing Corn, 16p	1.05
U2046	Fundamentals of Marketing Agricultural Products, 8p	.50

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Slidefilm

Insurance in the Farm Business

This slidefilm discusses the major kinds of insurance coverages needed by farm operators, including life, fire, crop, liability, and hospitalization.

F380a	Slidefilm, 54 fr.	$ 12.40

Transparencies

Grain Futures Transparencies

This set of 51 transparencies discusses how farmers can use futures markets. Major topics include: Essentials of Futures Contracts, Delivery Months, Settlement, Cash Markets, Futures Markets, and Margins and Commissions. Problems in the set illustrate pricing stored grains, growing crops and feed grains, and projecting prices.

T321	Transparency Set, 51 fr.	$ 23.25

RECORDS

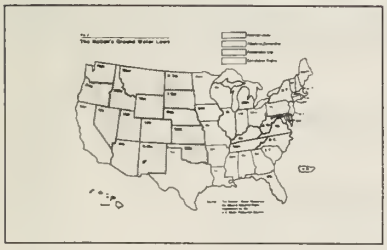
Subject-Matter Units, Test Questions, Teacher's Keys

U2008c	Record Keeping on the Farm, 12p	$ .80
U2009c	Using the Illinois Farm Record Book, 20p	1.30
U2037a	Setting Up Farm Records to Provide for Analysis, 12p	.80
Q2037a	Test Questions, pkg. of 10	1.50
K2037a	Teacher's Key for Q2037a	.55
U2041a	Keeping Records of the Supervised Farming Program, 28p	1.80

Other Materials

Z315	Machine Hire Rates Based on Costs, 6p	$ .40
Q351	Problem for use with Illinois Farm Record Book (1982)	.25
K351	Key to Record Problem (1982)	.95
Z351-1	Practice Record Book for use with Problem Q351	1.55
Z352-1	Livestock Package, Analysis chart, 10 blank charts, tabulation sheet	.55
Z352-2	Crops Package, Analysis chart, 10 blank charts, tabulation sheet	.55
Z354	Standards for Measures of Efficiency for 1990, 8p This item, based on FBFM records, provides standards for use in analyzing and evaluating student records.	.50
Z373	Hedging Worksheet, pkg. of 10, with Key	2.50

MISCELLANEOUS



Subject-Matter Units, Test Questions, Teacher's Keys

U2018d	Law for the Farmer, 28p	$ 1.80
Q2018d	Test Questions, pkg. of 10	1.50
K2018d	Teacher's Key for Q2018d	.55
U2042	Land Surveys and Descriptions, 8p	.50
Q2042	Test Questions, pkg. of 10	1.50
K2042	Teacher's Key for Q2042	.55
U2045	Water Use and Allocation Laws, 8p	.50

Other Materials

Q375	Review Questions for a Farm Business Management Contest, 32p	$ 1.65
K375	Instructor's Key for Farm Business Management Contest Review Questions, 32p	1.65

Additional study guides are available at a cost of $1.50 each.

AGRICULTURAL MECHANICS SHOP

Subject-Matter Units, Test Questions, Teacher's Keys

U3005	Sharpening Hand Tools, 16p	$ 1.05
U3015	Spray Painting, 28p	1.80
U3018	Air Compressors, 20p	1.30
U3022a	Safety in the Shop, 32p	2.10
Q3022	Student Safety Tests, 32p	2.10
K3022	Teachers' Key for Q3022	2.10
U3023	Micrometers & Related Measuring Tools, 8p	.50
U3044	A Color Code for Shop Safety, 12p	.80
U3051a	Planning a Woodworking Project, 20p	1.30
Q3051	Test Questions, pkg. of 10	1.50
K3051	Teacher's Key for Q3051	.55

Slidefilms

How To Use It Safely Slidefilm Series

These 7 slidefilms show how to safely use 6 of the most common power tools in the shop plus power lawn mowers. Safe operation is stressed along with instruction on how to perform the most common and useful operations with each tool. These are useful for every shop orientation class and as a refresher for more advanced students.

F460	The Jointer, 35 fr.	$ 8.05
F461	The Drill Press, 48 fr.	11.05
F462	The Circular Saw, 57 fr.	13.10
F463	The Power Grinder, 48 fr.	11.05
F464	The Radial Arm Saw, 61 fr.	14.05
F465	The Portable Electric Saw, 57 fr.	13.10
F498	Using the Power Lawn Mower Safely, 78 fr.	17.95

Transparencies, Study Guides

Shop Tool Identification

This set of 24 transparencies includes artist's sketches of 171 common shop tools. The tools are arranged in 6 different categories: carpentry and woodworking, engine and machinery, metalworking, various construction skills, hand power, and horticulture. Detailed transparencies are included on Nail Hammers, Hand Saws, Brace and Bits, and Bench Planes. A 12-page study guide provides additional information about the tools.

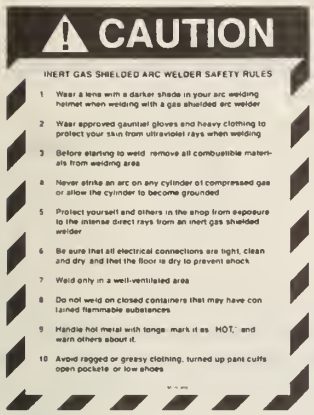
T457	Transparency Set, 24 fr., with study guide	$ 12.60

Charts on Safety Rules

These 27 laminated 8 1/2" x 11" charts are designed to be placed at those strategic places in the shop where students need to be constantly reminded of the importance of working safely in the shop. Heavy black print is highly visible on bright yellow paper. Teachers may wish to place Z490.2 at several different locations to emphasize the importance of Eye Protection.

Z490.1	General Shop	$ 1.10
Z490.2	Everyone Must Wear Safety Glasses at all Times in Shop	1.10
Z490.3	Think Safety to be Safe	1.10
Z490.4	No Horseplay or Running in Shop	1.10
Z490.5	Tools Must be Returned & Shop Cleaned After Each Class	1.10
Z490.20	Hand Tool	1.10
Z490.21	Electrical Equipment	1.10
Z490.22	Vehicle and Machinery Repair	1.10
Z490.23	Soldering and Sheet Metal Work	1.10
Z490.30	Portable Circular Saw	1.10
Z490.31	Tilting Arbor Saw	1.10
Z490.32	Radial Arm Saw	1.10
Z490.33	Saber and Reciprocating Saw	1.10

*Cassette Tapes of study guides are available at an additional cost of $3.85.



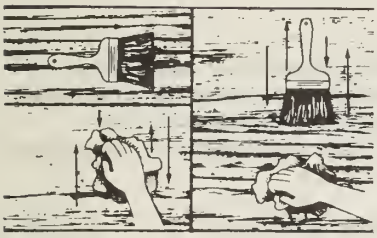
Z490.34	Band Saw	1.10
Z490.35	Power Metal-Cutting Saw	1.10
Z490.40	Jointer	1.10
Z490.41	Router and Planer	1.10
Z490.42	Sander	1.10
Z490.43	Stationary Grinder	1.10
Z490.44	Portable Grinder	1.10
Z490.45	Drill Press	1.10
Z490.46	Portable Drill	1.10
Z490.60	Shielded Metal Arc Welder	1.10
Z490.61	Oxyfuel Welder	1.10
Z490.62	Inert Gas Shielded Arc Welder	1.10
Z490.63	Spot Welder	1.10
Z490.70	Gas Forge	1.10

Special series price ——— MZ490 Set of 27 Charts on Safety Rules $ 24.30

CARPENTRY AND CONSTRUCTION

Subject-Matter Units, Test Questions, Teacher's Keys

U3007a	Concrete Improvements for Farm & Home, 28p	$ 1.80
Q3007a	Test Questions, pkg. of 10	1.50
K3007a	Teacher's Key for Q3007a	.55
U3009a	Using the Carpenter's Square, 20p	1.30
U3034	Recommended Practices for Building with Concrete Masonry, 16p	1.05
U3035	Applying Asphalt Roofing & Siding, 24p	1.55
U3039	Glazing, 8p	.50
U3042	Plywood Applications in Farm Construction, 28p	1.80
U3045	Metal Roofing & Siding for Farm Structures, 16p	1.05
U3050	How Can I Save Money and Energy by Insulating My Home?, 16p	1.05
Q3050	Test Questions, pkg. of 10	1.50
K3050	Teacher's Key for Q3050	.55
U3052	Selecting Fasteners & Hardware, 16p	1.05
Q3052	Test Questions, pkg. of 10	1.50
K3052	Teacher's Key for Q3052	.55
U3053	Paints and Painting, 20p	1.30
Q3053	Test Questions, pkg. of 10	1.50
K3053	Teacher's Key for Q3053	.55
U3055	Lumber: Grading, Selecting, Buying, Using, and Storing, 20p	1.30
Q3055	Test Questions, pkg. of 10	1.50
K3055	Teacher's Key for Q3055	.55
U3056	Designing, Installing, Maintaining and Repairing Plumbing Systems, 40p	2.60
U3060	Collecting and Using Solar Energy, 32p	2.10
Q3060	Test Questions, pkg. of 10	1.50
K3060	Teacher's Key for Q3060	.55



Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Electrical Wiring in Livestock Confinement Buildings

This program describes electrical wiring materials and techniques to be used in a hostile environment. Equipment is discussed from the service entrance panel and wiring to the receptacles, switch boxes, and lights. This material is suitable for anyone interested in modern livestock buildings and electrical wiring materials, equipment, and practices.

F406	Slidefilm, 70 fr., with study guide*	$ 17.60
S406	Slide Set, 70 fr., with study guide*	29.50

Additional study guides are available at a cost of $1.50 each.

Truss Construction--A Farm Shop Project

This 63-frame slidefilm presents a step-by-step procedure for constructing a truss in the shop which is properly designed to support the roof of the building.

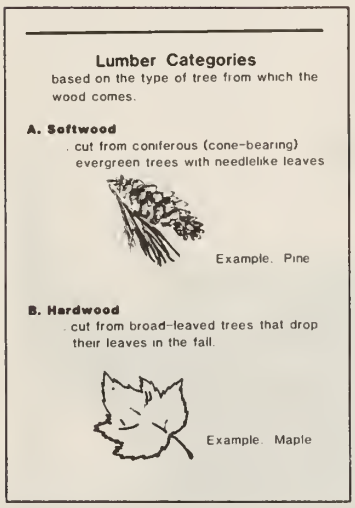
F425	Slidefilm, 63 fr.	$ 14.50

Transparencies, Study Guides, Cassette Tapes

Carpentry Transparency Series

These 2 sets of transparencies relate to the use of the steel square in the shop or on the job. Students who are planning a woodworking project in the shop will want to study these.

T422	Rafter Marking, 31 fr., with study guide*	$ 15.75
T423	Steel Square, 25 fr.	11.55



Lumber--Buying, Grading, Selecting, Storing and Using

This set of 50 transparencies is accompanied by a 20-page study guide. These transparencies may be used as a single resource or used with the related subject-matter unit U3055 which has the same title. Important definitions, illustrations, examples, and tables provide information the student needs to learn about lumber.

T426	Transparency Set, 50 fr., with study guide*	$ 24.30

Planning a Woodworking Project

This set of 34 transparencies is accompanied by a 12-page study guide. These transparencies are designed to supplement the related subject-matter unit, U3051a. All the important illustrations, tables, forms, and plans explained in the unit are included in the transparencies. These transparencies are especially useful when working with the beginning student.

T427	Transparency Set, 34 fr., with study guide*	$ 17.10

Solar Energy Transparency Series

Two sets of transparencies include discussions of types of collectors and how they are designed, how heat from solar energy is collected, stored, and distributed, and solar systems commonly used in homes and buildings. These transparency sets are based on the Vocational Agriculture Service subject-matter unit U3060, ***Collecting and Using Solar Energy***. Each transparency set is accompanied by a study guide.

T428	Collecting and Storing Solar Energy, 45 fr.,with study guide	$ 22.05
T429	Using Solar Energy, 34 fr., with study guide	17.10

*Cassette Tapes of study guides are available at an additional cost of $3.85.

ELECTRICITY

Subject-Matter Units, Exercises, Teacher's Keys

U3003b	Planning for Electrical Wiring, 44p	$ 2.85
U3012a	Electrical Hazards in Home, Farm, and Business, 40p	2.60
U3016a	Electrical Wiring Procedures, 28p	1.80
Z3016a	Electrical Wiring Exercises, 20p	1.30
U3038	Using Three-Phase Electrical Power on the Farm, 8p	.50
Y3057	Applying Electrical Controls in Farm Production, 12p	.80
Z3057a	Electrical Controls Exercises, 52p	3.40
K3057a	Instructor's Key to Z3057a, 16p	1.05

This 52-page booklet, *Electrical Controls Exercises*, contains 20 exercises which help students understand time switches, photocells, humidistats, thermostats, relays, push-button stations, magnetic motor starters, and other electrical controls commonly used for agricultural applications. Detailed instructions and diagrams provide for hands-on experiences for students. Questions are included in each exercise, space is provided for student answers, and a separate Instructor's Key to Electrical Controls Exercises is available for the teacher's convenience.

U3058	Selecting Electric Motors for Use in Agriculture, 24p	1.55
U3059	Installing and Caring for Electric Motors in Agriculture, 28p	1.80

Slidefilms

Identification of Electrical Wiring Items

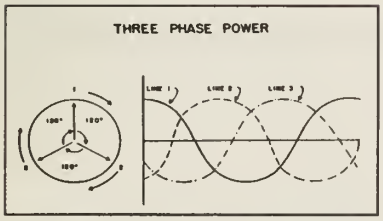
F404c	Slidefilm, 66 fr.	$ 15.20

Electric Motors Slidefilm Series

This series of 6 slidefilms includes basic scientific principles of magnetism and electricity related to both DC and AC electric motors. Practical procedures for testing, connecting, reversing, troubleshooting, cleaning, and maintaining electric motors are included in these slidefilms.

F412a	Magnetism and the DC Motor, 34 fr.	$ 7.80
F413a	Induction and the AC Motor, 36 fr.	8.30
F414a	Testing and Identifying Leads, Connecting and Reversing, 39 fr.	8.95
F415a	Trouble Shooting, 64 fr.	14.70
F416	Cleaning Electrical Motors, 46 fr.	10.60
F417	Practical Maintenance of Electric Motors, 55 fr.	12.65

Transparencies



Electricity Transparency Series

These 2 sets of transparencies are designed for use in a class involving electric wiring and electric motors. T400 contains 48 wiring exercises.

T400	Wiring Exercises, 52 fr.	$ 23.70
T410	Electric Motors, 60 fr.	27.30

Other Materials

Z401	Suggestions for Wiring 100-Amp. Service Entrance Box, 8p	$ .25

Additional study guides are available at a cost of $1.50 each.

MACHINERY

Subject-Matter Units

U3021a	Row-Crop Planters, 48p	$ 3.10
U3047	Introduction to Combines, 12p	.80
U3048	Combines--Selecting and Servicing, 16p	1.05
U3049	Combines--Reducing Harvesting Losses, 28p	1.80

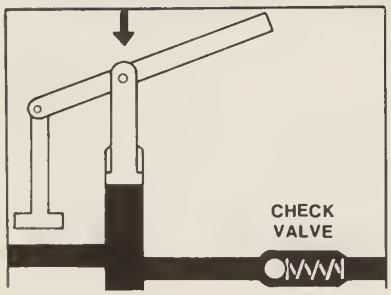
Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Calibration of Pesticide Application Equipment Series

These slidefilms are also available as slide sets and each is accompanied by a study guide. Also available is a reference manual, a booklet of sample problems, an instructor's key, and a cassette tape of each study guide. Topics stressed are determining amounts of pesticides to apply per acre, selection of nozzles and tip size, calibration, measuring ground speed, determining the amount of pesticide to add to the spray tank, and safety.

SLIDEFILMS -- with study guides		
F444-1	Calibration of Low-Pressure Field Sprayers, 80 fr.*	$ 19.90
F444-2	Calibration of Granular Applicators, 62 fr.*	15.75
F444-3	Calibration of High-Capacity Flotation Sprayers, 80 fr.*	19.90
F444-4	Calibration of Commercial Pesticide Application Equipment for Ornamentals & Turfgrass, 80 fr.*	19.90
F444-5	Calibration of Homeowner Chemical Application Equipment, 74 fr.*	18.50
F444-6	Calibration of Equipment for Applying Pesticides on Rights-of-Way and Other Noncrop Areas, 62 fr.*	15.75
F444-7	Calibration of Air-Carrier Sprayers, 41 fr.*	10.95
SLIDE SETS -- with study guides		
S444-1	Calibration of Low-Pressure Field Sprayers, 80 fr.*	$ 33.50
S444-2	Calibration of Granular applicators, 62 fr.*	26.30
S444-3	Calibration of High-Capacity Flotation Sprayers, 80 fr.*	33.50
S444-4	Calibration of Commercial Pesticide Application Equipment for Ornamentals and Turfgrass, 80 fr.*	33.50
S444-5	Calibration of Homeowner Chemical Application Equipment, 74 fr.*	31.10
S444-6	Calibration of Equipment for Applying Pesticides on Rights-of-Way and Other Noncrop Areas, 62 fr.*	26.30
S444-7	Calibration of Air-Carrier Sprayers, 41 fr.*	17.90
MANUALS		
M444-1	Calibration of Low-Pressure Field Sprayers	$ 1.50
M444-2	Calibration of Granular Applicators	1.50
M444-3	Calibration of High-Capacity Flotation Sprayers	1.50
M444-4	Calibration of Commercial Pesticide Application Equipment for Ornamentals and Turfgrass	1.50
M444-5	Calibration of Homeowner Chemical Application Equipment	1.50
M444-6	Calibration of Equipment for Applying Pesticides on Rights-of-Way and Other Noncrop Areas	1.50
M444-7	Calibration of Air-Carrier Sprayers	1.50

NOTE: Sample Problems and Teacher's Keys for each of the above titles are available at an additional cost of $1.50 each.



Transparencies, Study Guides

Basic Principles of Hydraulics

These 59 transparencies and an information packed 16-page study guide provide an excellent teaching tool. Emphasis is on hydraulic principles, basic formulas, pistons, pumps, valves, and design functions of hydraulic systems. This teaching aid is especially valuable in providing the student with an understanding of the basic principles of hydraulics.

T440	Transparency Set, 59 fr., with study guide	$ 28.35

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Other Materials

Z3049.1	Measuring Harvesting Losses--Corn, pkg. of 10	$ 1.00
Z3049.2	Measuring Harvesting Losses--Soybeans, pkg. of 10	1.00
Z3049.3	Measuring Harvesting Losses--Small Grain, pkg. of 10	1.00

SMALL ENGINES

Subject-Matter Units

U3014	Small Engines--Principles of Operation, Trouble-Shooting & Tune-Up, 16p	$ 1.05
U3019	Small Engines--Repair and Overhaul, 20p	1.30
U3020	The Two-Cycle Engine, 20p	1.30

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Small Engine Parts and Functions Series

These 4 films are available either as slide sets or slidefilms. Each film is accompanied by a study guide. A cassette tape is also available for each film. The parts of the small engine which are used in association with each title are pictured. The functions of each part are briefly explained. The last section of each program consists of pictures of the parts for identification by students. An answer key is provided in the final frames of each film. This series is especially useful for introducing beginning students to the study of small engines commonly used in agriculture.

SLIDEFILMS -- with study guides		
F486-1	Fuel-Air Induction, 80 fr.*	$ 19.90
F486-2	Compression, 80 fr.*	19.90
F486-3	Ignition, 60 fr.*	15.30
F486-4	Secondary Functions and Special Tools, 80 fr.*	19.90
SLIDE SETS -- with study guides		
S486-1	Fuel-Air Induction, 80 fr.*	$ 33.50
S486-2	Compression, 80 fr.*	33.50
S486-3	Ignition, 60 fr.*	25.50
S486-4	Secondary Functions and Special Tools, 80 fr.*	33.50

Transparencies

Small Gas Engines

This transparency set explains basic principles of small engine operation, repair and overhaul, and maintenance.

T489	Transparency Set, 50 fr.	$ 22.80

SURVEYING

Subject-Matter Units, Test Questions, Teacher's Keys

U2042	Land Surveys and Descriptions, 8p	$ .50
Q2042	Test Questions, pkg. of 10	1.50
K2042	Teacher's Key for Q2042	.55
U3010a	Agricultural Surveying, 24p	1.55

Additional study guides are available at a cost of $1.50 each.

Slidefilms, Slide Sets

Surveying Series

This series of 4 films presents information in color photographs, illustrations, and diagrams on using the steel tape, the level, taking field notes, and staking out a building.

SLIDEFILMS		
F436a	Using the Steel Tape in Surveying, 36 fr.	$ 8.30
F437a	Recording Field Notes for Surveying, 41 fr.	9.45
F438a	Using the Level in Farm Surveying, 79 fr.	18.15
F439a	Staking Out a Building Site, 33 fr.	7.60
SLIDE SETS		
S436a	Using the Steel Tape in Surveying, 36 fr.	$ 14.40
S437a	Recording Field Notes for Surveying, 41 fr.	16.40
S438a	Using the Level in Farm Surveying, 79 fr.	31.60
S439a	Staking Out a Building Site, 33 fr.	13.20

Other Materials

Z436	Field Book for Surveying Notes	$ .80

TRACTORS AND LARGE ENGINES

Subject-Matter Units, Test Questions, Teacher's Keys

U3008	Farm Tractor Tune-Up, 12p	$ .80
U3013a	Storing, Handling, and Using Fuels Safely, 16p	1.05
U3025	Engine Compression & Cylinder Leakage Testing, 16p	1.05
Q3025	Test Questions, pkg. of 10	1.50
K3025	Teacher's Key for Q3025	.55
U3028	The Ignition System--Testing and Analyzing Test Results, 28p	1.80
U3030	The Engine Cooling System, 24p	1.55
U3032	Electrical Fundamentals Useful in Engine Analysis, 20p	1.30
U3040	Preventing Tractor Overturns, 20p	1.30

Slidefilms, Slide Sets

Operator Responsibility for Diesel Engine Maintenance

These 62 frames, available as either a slidefilm or as a slide set, offer information on diesel fuel selection and storage and use of starting aids. Lubrication, air filter, and fuel system servicing procedures are examined. Also included is a section on proper diesel tractor operation.

F485	Slidefilm, 62 fr.	$ 14.25
S485	Slide Set, 62 fr.	24.80

The General Motors unit injector combines the fuel pump, fuel valve, and nozzle for each cylinder into a single unit.

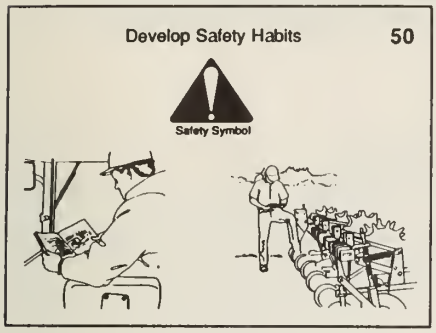
Diesel Engine Pump and Injection Nozzle Series

Four slide programs on diesel injector nozzles are available. These are useful for any class involved in the study of diesel engines.

S486.12	Removing Diesel Injection Nozzles, 20 fr.	$ 8.00
S486.13	Servicing Diesel Injection Nozzles, 29 fr.	11.60
S486.14	Testing Diesel Injection Nozzles, 24 fr.	9.60
S486.15	Types of Diesel Injection Nozzles, 14 fr.	5.60

*Cassette Tapes of study guides are available at an additional cost of $3.85.

NEW



Transparencies, Study Guides

Tractor Safety

This set of 50 transparencies has been thoroughly revised and expanded to update information and include suggested student activities. Safety rules and procedures are presented which apply to all sizes of tractors. Areas of safety discussed include starting, hitching, maintenance, highway travel, and operation. A study guide with appropriate information about each transparency is included.

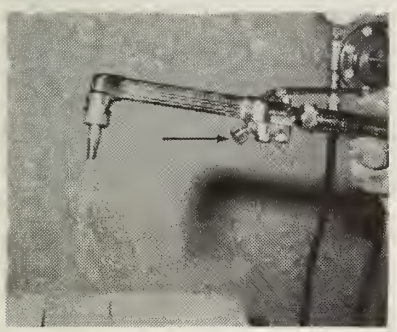
T485a	Transparency Set, 50 fr., with study guide	$ 24.30

WELDING AND METALWORK

Subject-Matter Units, Test Questions, Teacher's Keys

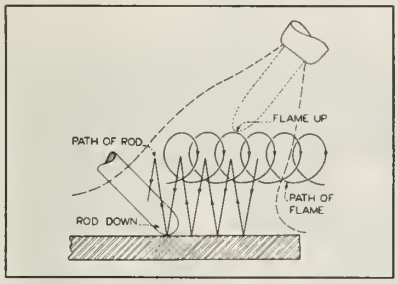
U3001a	Oxyacetylene Welding and Cutting, 28p	$ 1.80
U3002a	Cold Metal Work, 24p	1.55
Q3002a	Test Questions, pkg. of 10	1.50
K3002a	Teacher's Key for Q3002a	.55
U3004a	Shielded Metal-Arc Welding, 48p	3.10
U3027	Soldering for Home, Farm and Shop Applications, 24p	1.55
U3036	Tungsten Inert Gas (TIG) Welding, 32p	2.10
U3037	Metal Inert Gas (MIG) Welding, 44p	2.85
U3041	Ferrous Metals--Properties, Identification, and Treatment, 28p	1.80
U3043	Hot Metal Work, 20p	1.30

Slidefilms, Slide Sets, Cassette Tapes



Oxyacetylene Welding Series

This is a series of 12 programs available either as slidefilms or slide sets. They may be purchased separately or as a complete teaching package for oxyacetylene welding and cutting instruction.



SLIDEFILMS -- Oxyacetylene		
F454a	Equipment and Processes, 61 fr.*	$ 14.05
F455a	Equipment and Safe Practices, 93 fr.*	21.40
F456a	Equipment Setting Up, 57 fr.*	13.10
F471	Lighting and Adjusting the Flame, 42 fr.*	9.65
F472	Manual and Machine Cutting, 70 fr.*	16.10
F473	Bronze Welding, 63 fr.*	14.50
F474	Fusion Welding Steel, 74 fr.*	17.00
F475	Hard Facing, 50 fr.*	11.50
F476	Using Powder Braze Torch, 43 fr.*	9.90
F477	Aluminum Welding, 49 fr.*	11.25
F478	Silver Brazing, 52 fr.*	11.95
F479	Equipment Maintenance, 58 fr.*	13.35
SLIDE SETS -- Oxyacetylene		
S454a	Equipment and Processes, 61 fr.*	$ 24.40
S455a	Equipment and Safe Practices, 93 fr.*	37.20
S456a	Equipment Setting Up, 57 fr.*	22.80
S471	Lighting and Adjusting the Flame, 42 fr.*	16.80
S472	Manual and Machine Cutting, 70 fr.*	28.00
S473	Bronze Welding, 63 fr.*	25.20
S474	Fusion Welding Steel, 74 fr.	29.60
S475	Hard Facing, 50 fr.*	20.00
S476	Using Powder Braze Torch, 43 fr.*	17.20
S477	Aluminum Welding, 49 fr.*	19.60
S478	Silver Brazing, 52 fr.*	20.80
S479	Equipment Maintenance, 58 fr.*	23.20

Special series price

MF454a	Oxyacetylene Welding Series (12 slidefilms, 6 cassettes)	112.75
MS454a	Oxyacetylene Welding Series (12 slide sets, 6 cassettes)	176.00

Additional study guides are available at a cost of $1.50 each.

Arc Welding Slidefilm Series

The first 3 of these 4 slidefilms are available only as a complete set. Safety of operation is stressed while covering the welding equipment and processes for shielded metal arc welding (SMAW). Flat, vertical, horizontal, and overhead welding positions are introduced, explained, and illustrated.

F450	Process, Equipment and Safety, 45 fr.	
F451	Flat Position Welding, 63 fr.	
F452	Vertical, Horizontal, and Overhead Position, 34 fr.	
MF450	Complete set of above 3 slidefilms	$ 28.10
F470	Care and Maintenance of Arc Welding Equipment, 56 fr.	12.90

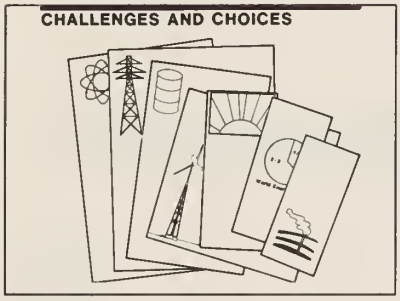
Transparencies

Arc Welding Transparencies

T450	Shielded Metal-Arc Welding, 80 fr.	$ 36.30
T454	Inert Gas Welding, 65 fr.	29.55

MISCELLANEOUS

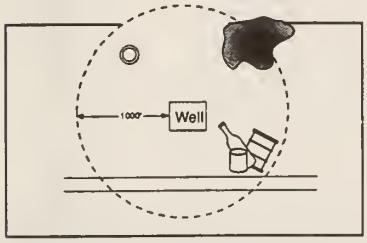
Slidefilms, Slide Sets, Study Guides, Cassette Tapes



Energy Challenges and Choices Series

Both programs are available as a slidefilm or slide set and are accompanied by a study guide. A cassette tape is available for each program. Part I of this timely subject explores present sources and potential future sources of energy. Topics include energy conservation and energy management. Part II focuses on efficient use of energy in the home including design features, construction practices, and appliance selection.

SLIDEFILMS -- with study guides		
F411-1	Part I: Energy Use and Supply, 46 fr.*	$ 12.10
F411-2	Part II: Home Energy Management, 80 fr.*	$ 19.90
SLIDE SETS -- with study guides		
S411-1	Part I: Energy Use and Supply, 46 fr.*	19.90
S411-2	Part II: Home Energy Management, 80 fr.*	33.50



Groundwater Series

These two new programs are available as slide sets or slidefilms. Each film is accompanied by a study guide. Cassette tapes are also available. *Groundwater Resources* discusses where groundwater occurs and how it is discovered; how groundwater is stored and how it moves below the surface; and how reserves are replenished. *Groundwater Protection* examines how groundwater may become contaminated and what is being done to protect groundwater supplies.

	SLIDEFILMS -- with study guides		
NEW	F490	Groundwater Resources, 52 fr.*	$ 13.45
NEW	F491	Groundwater Protection, 62 fr.*	15.75
	SLIDE SETS -- with study guides		
NEW	S490	Groundwater Resources, 52 fr.*	22.30
NEW	S491	Groundwater Protection, 62 fr.*	26.30

Agricultural Mechanics Contest registration cards are listed in the MISCELLANEOUS section under Judging Materials.

*Cassette Tapes of study guides are available at an additional cost of $3.85.

FLORICULTURE

Subject-Matter Units, Test Questions, Teacher's Keys

U5006a	Producing Plants by Asexual Propagation, 20p	$ 1.30
U5007	Growing Plants Indoors, 12p	.80
U5010a	Growing Flowering Annuals, 24p	1.55
Q5010a	Test Questions, pkg. of 10	1.50
K5010a	Teacher's Key for Q5010a	.55
U5011	Poinsettias, Care and Propagation, 8p	.50
U5013	Producing Poinsettias Commercially, 12p	.80
U5017a	Careers in the Retail Flower Shop Business, 8p	.50
U5019	Care of Flowering Pot Plants in the Home, 8p	.50
U5020	Reblooming Flowering Gift Plants, 28p	1.80
U5023	Soils for Plant Growth--Amendments for Container Soils, 8p	.50
U5024	Soils for Plant Growth--Standardized Growing Media, 8p	.50
U5035	Preparing Plant Materials for Dried Arrangements, 20p	1.30
U5039	Growing Geraniums, 20p	1.30

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Identifying Coniferous Trees

F504	Slidefilm, 59 fr.	$ 13.55

Introduction to Plant Propagation by Tissue Culture

Introduces the viewer to the concept of growing plants by tissue culture, a relatively new plant propagation method. Supplies, equipment, and techniques used in tissue culture are described. Conditions required to maintain established cultures are also discussed. Film and script explain in common terminology various aspects of these innovative procedures used by plant propagators and researchers.

F600-1	Slidefilm, 61 fr., with study guide*	$ 15.55
S600-1	Slide Set, 61 fr., with study guide*	25.90

Bedding Plants, Part I

Shows annual bedding plants and gives cultural information. Practice sets are useful for review and testing.

NEW	F601a	Slidefilm, Part I, 63 fr., with study guide	$ 16.00
NEW	F601a(Supp)	Slidefilm--practice set for F601a, 44 fr.	5.75
NEW	S601a	Slide Set, Part I, 63 fr., with study guide	26.70
NEW	S601a(Supp)	Slide Set--practice set for S601a, 44 fr.	17.60

Garden Flowers, Annuals--Part II

Shows annual garden flowers in color and gives cultural information. Practice set is useful for review and testing.

F602	Slidefilm, Part II, 50 fr.	$ 11.50
F602(Supp)	Slidefilm--practice set for F602, 26 fr.	6.00
S602	Slide Set, Part II, 50 fr.	20.00

Diseases of Garden Flowers

Provides information needed for identification and control of common diseases of garden flowers.

F604	Slidefilm, 78 fr., with study guide*	$ 19.45
S604	Slide Set, 78 fr., with study guide*	32.70

Additional study guides are available at a cost of $1.50 each.

Design Materials: Cut Flowers and Foliage

In 64 frames, the viewer is introduced to popular cut flowers and foliage by common and scientific names. The script gives information on colors, sizes, seasons of availability, and keeping or lasting quality.

F605	Slidefilm, 64 fr., with study guide*	$ 16.20
S605	Slide Set, 64 fr., with study guide*	27.10

Design Techniques: Rose Corsage Construction

This 41-frame film describes in detail the construction of a rose (or carnation) corsage, from selection of plant material and supplies to preparing components and assembly of the corsage. Wiring and taping, plus flower and bow placement are illustrated.

F606-1	Slidefilm, 41 fr., with study guide*	$ 10.95
S606-1	Slide Set, 41 fr., with study guide*	17.90

Wiring and Taping Flowers and Foliage

In 33 frames, methods are explained for replacing or reinforcing natural plant stems with artificial ones. Common wire sizes, special wiring aids, wiring techniques, taping, and using picking machines are illustrated as common techniques used by floral designers when arranging plant materials.

F606-2	Slidefilm, 33 fr., with study guide*	$ 9.10
S606-2	Slide Set, 33 fr., with study guide*	14.70

Preserving Flowers and Foliage

Several methods of drying and processing flowers and foliage are described; included are pressing, air drying, burying, and glycerinating. The microwave oven is featured as an aid to burying-type drying. Photographs of flowers and foliage that preserve well are accompanied by a guide to appropriate drying methods.

F607	Slidefilm, 65 fr., with study guide*	$ 16.45
S607	Slide Set, 65 fr., with study guide*	27.50

Foliage Plant Identification Series

Illustrates foliage plants with color photos and identifies them by common and scientific names. Includes cultural details such as light, temperature, location, soil, and watering. Practice sets are suitable for review and testing.

SLIDEFILMS		
F610	Slidefilm, Part I, 49 fr.	$ 11.25
F610(Supp)	Slidefilm--practice set for F610, 39 fr.	8.95
F611	Slidefilm, Part II, 49 fr.	11.25
F611(Supp)	Slidefilm--practice set for F611, 39 fr.	8.95
F612	Slidefilm, Part III, 55 fr.	12.65
F612(Supp)	Slidefilm--Practice set for F612, 39 fr.	8.95
SLIDE SETS		
S610	Slide Set, Part I, 49 fr.	19.60
S611	Slide Set, Part II, 49 fr.	19.60
S612	Slide Set, Part III, 55 fr.	22.00

Special series price

MF610	Foliage Plant Identification Series (6 slidefilms)	43.55
MS610	Foliage Plant Identification Series (3 slide sets)	40.35

*Cassette Tapes of study guides are available at an additional cost of $3.85.

House Plant Care Series

Describes sound horticultural practices for care of hanging baskets and flowering plants. Perfect for introducing students to indoor horticulture.

SLIDEFILMS		
F613	Planting and Care of Hanging Baskets, 66 fr.	$ 15.20
F614-1	Care of Flowering Plants, 82 fr.	18.85
SLIDE SETS		
S613	Planting and Care of Hanging Baskets, 66 fr.	$ 26.40
S614-1	Care of Flowering Plants, 82 fr.	32.80

Herbaceous Perennials Series

Includes habit photographs of herbaceous perennials, plus close-up photos of flowers. Notes on culture and use of plants are provided. 655 describes 30 perennials; 656 describes 24 perennials. Practice sets are suitable for review and testing.

	SLIDEFILMS		
	F655	Slidefilm, 77 fr., with study guide	$ 19.20
	F655(Supp)	Slidefilm--practice set for F655, 47 fr.	10.80
NEW	F656	Slidefilm, 69 fr., with study guide	17.35
NEW	F656(Supp)	Slidefilm--practice set for F656, 45 fr.	11.85
	SLIDE SETS		
	S655	Slide Set, 77 fr., with study guide	$ 32.30
	S655(Supp)	Slide Set--practice set for S655, 47 fr.	18.80
NEW	S656	Slide Set, 69fr., with study guide	27.60
NEW	S656(Supp)	Slide Set--practice set for S656, 45 fr.	18.00

Ornamental Grasses

Includes habit photographs of 19 ornamental grasses, as well as close-up photos of certain ornamental characters. Notes on culture and use of grasses are provided. An extensive list of wholesale and retail sources is included.

NEW	F660	Slidefilm, 61 fr., with study guide	$ 15.55
NEW	F660(Supp)	Practice Set for F660, 42 fr.	9.65
NEW	S660	Slide Set, 61 fr., with study guide	25.90
NEW	S660(Supp)	Practice Set for S660, 42 fr.	16.80

Greenhouses--Uses and Design

Shows various types of greenhouses, including even-span and lean to. Greenhouse coverings and bench arrangements are described.

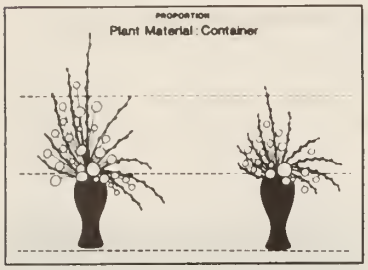
F680	Slidefilm, 44 fr.	$ 10.10

Soils for Plant Growth Series

Explains the physical characteristics of soil and how they affect plant growth, in the field and in containers. Describes soil amendments to improve soil physical properties so optimum plant growth conditions are achieved.

SLIDEFILMS -- with study guides		
F690-1	Air and Water in Soils, 39 fr.*	$ 10.45
F690-2	Container Soils, 42 fr.*	11.15
F690-3	Modifying Container Soils, 35 fr.*	9.55
Special series price MF690-1	Soils for Plant Growth Series (3 slidefilms)*	21.65

Additional study guides are available at a cost of $1.50 each.



Transparencies, Study Guides

The Principles of Floral Design Transparencies

Explains design elements used in every good floral design. Emphasized are various major floral design principles, including Proportion, Balance, Rhythm, and Dominance. Radiation, repetition, transition, variety, and contrast are explained as minor design principles. Principles and techniques are illustrated by floral drawings, as well as abstract shapes and forms.

T620	Transparency Set, 42 fr., with study guide	$ 20.70

FRUITS

Subject-Matter Units

U4043	Pruning Fruit Trees, 8p	$ .50
U5026	Growing Raspberries and Blackberries in the Midwest, 16p	1.05
U5027	Growing Strawberries, 28p	1.80
U5027(Supp)	Strawberry Cultivars, 8p (color)	1.40
U5028	Growing Blueberries, 20p	1.30
U5029	Growing Grapes, 24p	1.55

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Strawberry Production

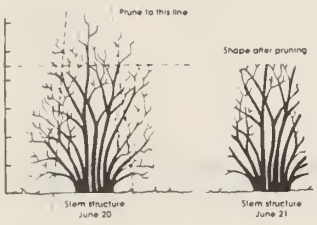
A thorough overview of strawberry production. Choosing and ordering of plants, choosing a training system, site selection, and soil preparation are described. Planting, first growing season operations, second growing season care, and renovation are depicted by 40 photos and many line drawings.

F692	Slidefilm, 76 fr., with study guide*	$ 19.00
S692	Slide set, 76 fr., with study guide*	31.90

LANDSCAPING AND LANDSCAPE MATERIALS

Subject-Matter Units, Test Questions, Teacher's Keys

U5001a	Trees for Landscaping (with 8-page color insert), 44p	$ 3.55
U5002a	Transplanting Trees, 16p	1.05
U5003	Fertilizing and Watering Shade and Ornamental Trees, 12p	.80
U5004a	Controlling Plant Growth, 20p	1.30
U5005b	Controlling Tree and Shrub Insects, 28p	1.80
Q5005b	Test Questions, pkg. of 10	1.50
K5005b	Teacher's Key for Q5005b	.55
U5014	Growing Lilies, 20p	1.30
U5021	Identifying Tree and Shrub Insects, 16p	1.05
Q5021	Test Questions, pkg. of 10	1.50
K5021	Teacher's Key for Q5021	.55
U5022	Using Coniferous Evergreens in a Landscape, 32p	2.10
U5034	Vines for Landscaping, 40p	2.60
U5037	Plant Hardiness, 12p	.80
U5040	**Pruning and Care of Trees and Shrubs, 60p**	**3.90**



NEW ——

This unit's major sections are pruning evergreens, pruning deciduous trees and shrubs, growing a strong tree, and insect control. The appendix gives information about preventing tree damage around construction sites, specific instructions for pruning common shrubs, and groups trees according to use. Includes 71 figures.

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Objectives of Pruning Deciduous Trees

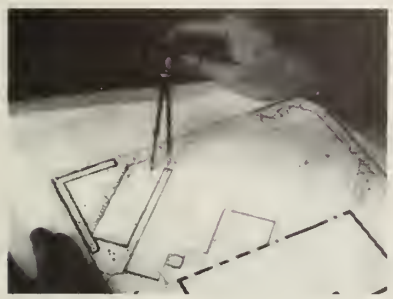
Gives reasons and specific directions for pruning many common landscape plants.

F615	Slidefilm, 58 fr., with study guide*	$ 14.85
S615	Slide Set, 58 fr., with study guide*	24.70

Introduction to Landscape Design

First in a three-part series, this 80-frame film introduces a step-by-step procedure for developing a good landscape plant. The film is arranged in 4 major subtopics: Site Analysis, Design Concepts, Design Elements, and Design Mechanics.

F621-1	Slidefilm, 80 fr., with study guide*	$ 19.90
S621-1	Slide Set, 80 fr., with study guide*	33.50



Creating a Design

This 81-frame film uses background information from 621-1 to lead the student into developing a design. Drawing mechanics are given special emphasis, as is Designing Walks and Driveways, Patios and Construction Materials, Patio Construction, Designing Planting Beds and Lawn Areas, Designing Fences and Storage, Maintaining Design Lines on the Ground, and Flowers and Roses in the Garden.

F621-2	Slidefilm, 81 fr., with study guide*	$ 20.15
S621-2	Slide Set, 81 fr., with study guide*	33.90

Putting Plants into the Design

In 81 frames, correct procedures for putting plants into the design are presented. Bed staking, edging, bed preparation, planting hole excavation, top pruning, root pruning, mulching, boulder and rock incorporation, tree staking and guying, bricks and pavers, and retaining walls are featured.

F621-3	Slidefilm, 81 fr., with study guide*	$ 20.15
S621-3	Slide Set, 81 fr., with study guide*	33.90

Landscape Construction Series

A convenient collection of slide sets detailing construction of landscape components. From bed edging to patios, these films give practical and useful diagrams to aid in landscape construction.

S626	Plan Interpretation, Surveying, Edging, Planning, Bed Preparation, 77 fr., with study guide	$ 32.30
S627	Planting, Protecting Existing Features, 71 fr., with study guide	29.90
S628	Walks, Steps, Retaining Walls, 80 fr., with study guide	33.50
S629	Fencing, Patios, 73 fr., with study guide	30.70
S630	Mounds, Boulders, Statuary, Lighting, 74 fr., with study guide	31.10
S631	Structures, Seating, Play Areas, Containers, 81 fr., with study guide	33.90
S632	Water Features, Irrigation, Materials, 81 fr., with study guide	33.90

Special series price ——— MS626 Landscape Construction Series (7 slide sets) 149.50

Additional study guides are available at a cost of $1.50 each.

Landscape Planting Plan Series

Each set in this series presents a landscape plan for a particular type of home, illustrates the plants recommended by the plan, and gives an alternative planting list.

SLIDEFILMS -- with study guides		
F642	Landscaping--Dos and Don'ts, 86 fr.*	$ 21.30
F625-1.1	Split-Level Home, 57 fr.	14.60
F625-1.2	Two-Story Victorian Style Home, 21 fr.	6.35
F625-1.3	One-Story Ranch Style Home, 29 fr.	8.15
F625-1.4	Two-Story Cape Cod Home, 42 fr.	11.15
F625-1.5	Early American Restored Home, 21 fr.	6.35
F625-1.6	Two-Story Ranch Home, 37 fr.	10.00
F625-1.7	Two-Story Colonial Home, 30 fr.	8.40
SLIDE SETS -- with study guides		
S642	Landscaping--Dos and Don'ts, 86 fr.*	$ 35.90
S625-1.1	Split-Level Home, 57 fr.	24.30
S625-1.2	Two-Story Victorian Style Home, 21 fr.	9.90
S625-1.3	One-Story Ranch Style Home, 29 fr.	13.10
S625-1.4	Two-Story Cape Cod Home, 42 fr.	18.30
S625-1.5	Early American Restored Home, 21 fr.	9.90
S625-1.6	Two-Story Ranch Home, 37 fr.	16.30
S625-1.7	Two-Story Colonial Home, 30 fr.	13.50

Special series price

MF625-1.1	Landscape Planting Plan Series (8 slidefilms)	60.00
MS625-1.1	Landscape Planting Plan Series (8 slide sets)	94.00

Tree Identification

Shows tree identification characteristics as line drawings, habit illustrations, and color photos. Includes information on culture and growth rate, as well as highlighting landscape potential.

S636	Slide Set, 200 fr.	$ 81.60

Dwarf Conifers

Describes the origin of dwarf conifers and their use in landscaping. Twenty-six dwarf conifers are illustrated and described in cultural terms.

F637	Slidefilm, 58 fr., with study guide*	$ 14.85
S637	Slide Set, 58 fr., with study guide*	24.70

Major Pruning of Trees

Describes pruning techniques such as repairing a broken leader and a split crotch. Emphasis is placed on pruning plant parts which have been damaged by ice, wind, insects, disease, and crossed branches.

F639	Slidefilm, 53 fr., with study guide*	$ 13.70
S639	Slide Set, 53 fr., with study guide*	22.70

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Pruning Series

Gives reasons and specific directions for pruning many common landscape plants.

SLIDEFILMS -- with study guides		
F643	Pruning Evergreens, 79 fr.*	$ 19.65
F644	Pruning Deciduous Shrubs, 45 fr.*	11.85
F645	Pruning Flowering Trees, 46 fr.*	12.10
SLIDE SETS -- with study guides		
S643	Pruning Evergreens, 79 fr.*	$ 33.10
S644	Pruning Deciduous Shrubs, 45 fr.*	19.50
S645	Pruning Flowering Trees, 46 fr.*	19.90
MF643	Complete Series: 643, 644, 645*	30.30
MS643	Complete Series: 643, 644, 645*	48.15

Special series price

Ground Covers and Their Uses

Suggests ground covers appropriate for specific areas or sites. Fifty ground covers are illustrated with photographs and their culture is described in detail. An excellent film to increase awareness of ground covers.

F646	Slidefilm, 60 fr., with study guide	$ 15.30
S646	Slide Set, 60 fr., with study guide	25.50

Establishing a *Rhododendron* Planting

Rhododendrons and azaleas are sometimes excluded from landscapes because they require special site preparations and cultural care. This film dispels some of the mysteries surrounding *Rhododendron* and give pointers for establishing and maintaining a vigorous planting. Soil amendments, planting guidelines, mulching, and post-planting care are described. Recommended cultivars for midwestern gardeners are listed.

F648-1	Slidefilm, 43 fr., with study guide*	$ 11.40
S648-1	Slide Set, 43 fr., with study guide*	18.70

Nursery/Landscape Plant Identification

On each frame, a color photograph and original line drawing depict habit and identification characteristics. Each plant is identified by scientific and common names. Sets marked *Supp* have no identifying names and are suitable for review or testing.

F664	Slidefilm, 116 fr.	$ 26.70
F664(Supp)	Slidefilm, practice set for F664, 116 fr.	26.70
S664	Slide Set, 116 fr.	46.40
S664(Supp)	Slide Set, practice set for S664, 116 fr.	46.40

Plant Anatomy Series

Illustrates various types of pods, fruits, nuts, flowers, and inflorescences, using familiar examples. A basic introduction to floral and fruit structures.

SLIDEFILMS -- with study guides		
F670-1	Identification of Pods, Fruits, and Nuts, 70 fr.*	$ 17.60
F670-2	Identification of Flowers and Inflorescences, 73 fr.*	18.30
SLIDE SETS -- with study guides		
S670-1	Identification of Pods, Fruits, and Nuts, 70 fr.*	$ 29.50
S670-2	Identification of Flowers and Inflorescences, 73 fr.*	30.70
MF670-1	Plant Anatomy Series (2 slidefilms)*	24.85
MS670-1	Plant Anatomy Series (2 slide sets)*	39.95

Special series price

Additional study guides are available at a cost of $1.50 each.

Landscape Design Series

Introduces aspects of good design, elements of design, considerations in planning, and specific types of design.

SLIDEFILMS – with study guides		
F620-1	Fundamental Aspects of Good Design, 99 fr.*	$ 24.25
F620-2	Moods, Seasons, Soil and Water, 65 fr.*	16.45
F620-3	Considerations in Planning, 66 fr.*	16.70
F620-4	Small Properties, Naturalistic Landscapes and Patios, 67 fr.*	16.90
SLIDE SETS – with study guides		
S620-1	Fundamental Aspects of Good Design, 99 fr.*	$ 41.10
S620-2	Moods, Seasons, Soil and Water, 65 fr.*	27.50
S620-3	Considerations in Planning, 66 fr.*	27.90
S620-4	Small Properties, Naturalistic Landscapes and Patios, 67 fr.*	28.30

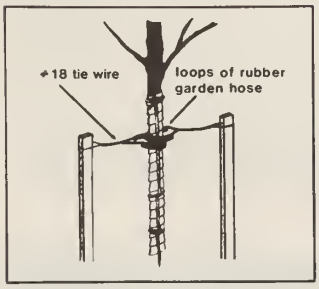
Special series price

MF620-1	Landscape Design Series (4 slidefilms)*	51.50
MS620-1	Landscape Design Series (4 slide sets)*	82.85

Nursery Management Series

An overall view of nursery management, this series illustrates typical nursery operations, including mechanical and hand digging, transplanting, propagation, and packaging.

SLIDEFILMS		
F641-1	Mechanical Digging of Trees and Shrubs, 74 fr.	$ 17.00
F641-2	Hand Digging of Trees and Shrubs, 45 fr.	10.35
F641-3	Proper Transplanting of Trees, 55 fr., with study guide*	14.15
F641-4	Care of Newly Planted Trees, 45 fr., with study guide*	11.85
F684	Container Production of Nursery Stock, 66 fr.	15.20
F685-1	Propagation of Evergreens for Nursery Production, 53 fr.	12.20
F685-2	Propagation of Deciduous Shrubs for Nursery Production, 39 fr.	8.95
F686	Packaging of Trees and Shrubs, 77 fr.	17.70



SLIDE SETS		
S641-1	Mechanical Digging of Trees & Shrubs, 74 fr.	$ 29.60
S641-2	Hand Digging of Trees & Shrubs, 45 fr.	18.00
S641-3	Proper Transplanting of Trees, 55 fr., with study guide*	23.50
S641-4	Care of Newly Planted Trees, 45 fr., with study guide*	19.50
S684	Container Production of Nursery Stock, 66 fr.	26.40
S685-1	Propagation of Evergreens for Nursery Production, 53 fr.	21.20
S685-2	Propagation of Deciduous Shrubs for Nursery Production, 39 fr.	15.60
S686	Packaging of Trees and Shrubs, 77 fr.	30.80

Special series price

MF641-1	Nursery Management Series (8 slidefilms)	74.90
MS641-1	Nursery Management Series (8 slide sets)	122.05

Transparencies

Landscape Construction Transparencies

A comprehensive series that shows construction details for fences, walls, earth features, driveways, sidewalks, patios lighting, and beds. Clear illustrations explain surveying, protecting existing features during construction, and tree planting procedures.

T617.1	Landscape Construction Accessories, 74 fr.	$ 33.60
T617.2	Landscape Construction, 86 fr.	39.00
T617.3	Landscape Planting and Bed Preparation, 30 fr.	13.80

Special series price

MT617.1	Landscape Construction Transparency Series (3 transparency sets)	62.50

*Cassette Tapes of study guides are available at an additional cost of $3.85.

TURFGRASS

Subject-Matter Units

U5008	Establishing A Lawn, 8p	$ .50
U5015	Turfgrass Diseases and Their Control, 28p	1.80
U5016a	Identifying and Controlling Lawn Insects, 20p	1.30
U5036	Maintaining a Weed-Free Lawn, 16p	1.05

NEW

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Lawn and Turfgrass Series

Reviews all basic steps in establishing and maintaining a healthy, attractive lawn. Identification of turfgrass and weeds, plus weed control are key features of this film series.

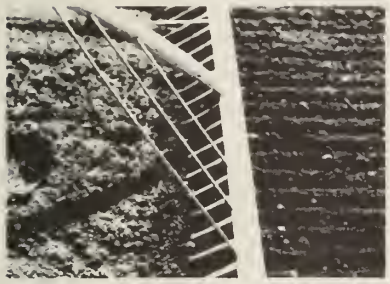
SLIDEFILMS -- with study guides

F650a	Lawn Weeds--Identification and Control, 76 fr.	$ 17.50
F651a	Steps to a Better Lawn, 85 fr.*	21.05
F652	Identifying Illinois Turfgrasses, 63 fr.	16.00

NEW

SLIDE SETS -- with study guides

S650a	Lawn Weeds--Identification and Control, 76 fr.	$ 30.40
S651a	Steps to a Better Lawn, 85 fr.*	35.50
S652	Identifying Illinois Turfgrasses, 63 fr.	26.70
S653	Seed Structure and Identification of Cool Season Turfgrasses, 61 fr.	25.90



Special series price

MF650	Lawn and Turfgrass Series (3 slidefilms)	38.20
MS650	Lawn and Turfgrass Series (4 slide sets)	82.95

VEGETABLES

Subject-Matter Units

U5030	Preparing for the Vegetable Garden, 12p	$ .80
U5031	Planting the Vegetable Garden, 20p	1.30
U5032	Caring for the Vegetable Garden, 16p	1.05
U5033	Growing and Harvesting Herbs, 40p	2.60

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Diseases of the Vegetable Garden

F1108-2.3	Slidefilm, 72 fr., with study guide*	$ 18.05
S1108-2.3	Slide Set, 72 fr., with study guide*	30.30

MISCELLANEOUS

Subject-Matter Units

U5025	Careers in Horticulture, 16p	$ 1.05
U5038	Horticultural Plant Names, 12p	.80

Additional study guides are available at a cost of $1.50 each.

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Insect Identification and Control Series

Common household and horticultural pests are illustrated in this new series. Each pest is identified by photograph; life cycle and habits are described (including damage); and chemical and nonchemical controls are listed.

SLIDEFILMS – with study guides		
F654.1	Household Insects: Identification & Control, 80 fr.*	$ 19.90
F654.2	Turf Insects: Identification & Control, 39 fr.*	10.45
F654.3	Vegetable Insects: Identification & Control, 80 fr.*	19.90
F654.4	Shade Tree & Woody Shrub Insects: Identification & Control, 78 fr.*	19.45
F654.5	Houseplant, Flower, & Fruit Insects: Identification & Control, 56 fr.*	14.40
SLIDE SETS – with study guides		
S654.1	Household Insects: Identification & Control, 80 fr.*	$ 33.50
S654.2	Turf Insects: Identification & Control, 39 fr.*	17.10
S654.3	Vegetable Insects: Identification & Control, 80 fr.*	33.50
S654.4	Shade Tree & Woody Shrub Insects: Identification & Control, 78 fr.*	32.70
S654.5	Houseplant, Flower, & Fruit Insects: Identification & Control, 56 fr.*	23.90

Special series price

MF654.1	Insect Identification & Control Series (5 slidefilms)*	58.70
MS654.1	Insect Identification & Control Series (5 slide sets)*	93.55

Horticulture Diseases and Pests Picture Sheets

X698.01	Flower Pests I	$ .30
X698.05	Houseplant Pests I	.30
X698.16	Ornamental Insects	.30
X698.17	Tree and Shrub Pests I	.30
X698.31	Turf Pests I	.30
X698.46	Fruit Pests I	.30
X698.61	Vegetable Pests I	.30
X698.76	Household Pests I	.30
X698.77	Household Pests II	.30
X699.01	Flower and House Plant Diseases I	.30
X699.02	Flower and House Plant Diseases II	.30
X699.03	Flower and House Plant Diseases III	.30
X699.04	Flower and House Plant Diseases IV	.30
X699.05	Flower and House Plant Diseases V	.30
X699.06	Flower and House Plant Diseases VI	.30
X699.16	Tree Diseases I	.30
X699.17	Tree Diseases II	.30
X699.18	Tree Diseases III	.30
X699.30	Woody Ornamental Diseases I	.30
X699.31	Turfgrass Diseases I	.30
X699.46	Apple Diseases I	.30
X699.47	Apple Diseases II	.30
X699.48	Cherry and Plum Diseases I	.30
X699.49	Cherry and Plum Diseases II	.30
X699.50	Grape Diseases I	.30
X699.51	Peach Diseases I	.30
X699.52	Peach Diseases II	.30
X699.53	Bramble Fruit Diseases I	.30
X699.54	Strawberry Diseases I	.30
X699.55	Strawberry Diseases II	.30
X699.56	Blueberry Diseases I	.30
X699.61	Vegetable Diseases I	.30
X699.62	Vegetable Diseases II	.30
X699.63	Vegetable Diseases III	.30
X699.64	Vegetable Diseases IV	.30

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Plant Diseases: Horticultural Plants

This 8 1/2" x 11" spiral bound booklet has 26 photo identification sheets, each of which has one side filled with 20 to 25 detailed color photos; the other side has concise descriptions. Disorders of indoor plants, turf, landscape plants, and fruits and vegetables are illustrated. Simplifies identification of many horticultural plant diseases.

MX699.96	Spiral bound booklet, 26 disease sheets	$ 11.25
MX699.95	Fruit & Vegetable Plant Diseases (8 1/2 x 11") 12 sheets which include: Apple Diseases I & II, Cherry and Plum Diseases I & II, Grape Diseases I, Bramble Fruit Diseases I, Peach Diseases I & II, Vegetable Diseases I, II, III, & IV	5.00

FORAGES

Subject-Matter Units

U4014a	Improving Permanent Pastures, 20p	$ 1.30
U4032b	Producing High Alfalfa Yields, 20p	1.30

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Efficient Alfalfa Production

F748	Slidefilm, 52 fr.	$ 11.95
S748	Slide set, 52 fr.	20.80

Diseases of Alfalfa

F749	Slidefilm, 42 fr., with study guide*	$ 11.15
S749	Slide Set, 42 fr., with study guide*	18.30

Diseases of Clovers

F750	Slidefilm, 40 fr., with study guide*	$ 10.70
S750	Slide Set, 40 fr., with study guide*	17.50

FORESTRY

Subject-Matter Units

U4018	Farmstead Windbreaks, 8p	$ .50
U4024	Planting and Care of Farm Forests, 16p	1.05

Transparencies

Forest Tree Identification

Over 90 native forest species are illustrated in this transparency set. Each 8 1/2" x 11" frame shows leaf, flower and/or fruit, and leaf arrangement characteristics. An enlarged twig illustration shows terminal buds and leaf scars in sufficient detail to teach identification features. Each frame is headed by common and scientific names. Since many native trees are used in landscape situations, this transparency set will be useful for horticulturists as well as foresters.

T780	Transparency Set, 92 fr.	$ 41.70

GRAIN PRODUCTION

Subject Matter Units

U4023b	Growing Oats, 16p	$ 1.05
U4027b	Growing Wheat, 28p	1.80
U4056	Wheat Diseases, 20p	1.30
U4039b	Corn Production, 20p	1.30
U4040a	Corn Insects and Their Control, 20p	1.30
U4055a	Growing Grain Sorghum, 20p	1.30
U4088	Growing Canola, 24p	1.55

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Slidefilms, Slide Sets, Study Guides Cassette Tapes

Planting Corn

Covers basic procedures in planting corn, including early planting, hybrid selection, seedbed preparation, fertilization, and weed and insect control.

F731a	Slidefilm, 70 fr.	$ 16.10
S731a	Slide Set, 70 fr.	28.00

Corn Problems Series

Illustrates many of the insects, diseases, and other problems that interfere with the normal growth and development of the corn plant.

SLIDEFILMS -- with study guides		
F732-1	Planting to Knee High, 66 fr.*	$ 16.70
F732-2	Knee High to Tasseling, 41 fr.*	10.95
F732-3	Tasseling to Maturity, 45 fr.*	11.85
SLIDE SETS -- with study guides		
S732-1	Planting to Knee High, 66 fr.*	$ 27.90
S732-2	Knee High to Tasseling, 41 fr.*	17.90
S732-3	Tasseling to Maturity, 45 fr.*	19.50

Special series price

MF732-1	Corn Problems Series (3 slidefilms)*	27.40
MS732-1	Corn Problems Series (3 slide sets)*	43.45

Recognizing Corn Herbicide Injury

F798-1	Slidefilm, 57 fr.	$ 13.10
S798-1	Slide Set, 57 fr.	22.80

PESTICIDES

Subject-Matter Units

Safe Use of Farm Chemicals Series

Safety in the use, storage, and application of agricultural chemicals is a common goal of agriculturists and the general public. Safe practices result from awareness of what agricultural chemicals are, how they can be used, how they are supplied, and how to respond to emergency situations. This series of 5 manuals and glossary covers the major aspects of agricultural pesticides and their safe use.

U4080	Pesticide Use: A Benefit/Risk Analysis, 20p	$ 1.30
U4081	Reading Chemical Container Labels, 16p	1.05
U4082	Using Farm Chemicals Safely, 24p	1.55
U4083	Managing the Environmental Impact of Pesticides, 24p	1.55
U4084	Pesticide Application: Equipment & Calibration, 28p	1.80
U4085	Glossary of Pesticide Terms, 8p	.50

Additional study guides are available at a cost of $1.50 each.

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Safe Use of Farm Chemicals Series

This series of films is designed to reinforce the information presented in the Safe Use of Farm Chemicals series of manuals. Together with those manuals, they are a thorough overview of agricultural pesticides and their safe selection, use, storage, and application.

SLIDEFILMS -- with study guides		
F780	Pesticide Use: A Benefit/Risk Analysis, 48 fr.*	$ 12.55
F781	Reading Chemical Container Labels, 42 fr.*	11.15
F782	Using Farm Chemicals Safely, 54 fr.*	13.90
F783	Managing the Environmental Impact of Pesticides, 36 fr.*	9.80
F784	Pesticide Application: Equipment & Calibration, 52 fr.*	13.45
SLIDE SETS -- with study guides		
S780	Pesticide Use: A Benefit/Risk Analysis, 48 fr.*	$ 20.70
S781	Reading Chemical Container Labels, 42 fr.*	18.30
S782	Using Farm Chemicals Safely, 54 fr.*	23.10
S783	Managing the Environmental Impact of Pesticides, 36 fr.*	15.90
S784	Pesticide Application: Equipment & Calibration, 52 fr.*	22.30

Special series price

MF780	Safe Use of Farm Chemicals Series (5 slidefilms)*	42.10
MS780	Safe Use of Farm Chemicals Series (5 slide sets)*	66.30

Assaying for Herbicide Residue

Presents steps involved in the biological assay, an alternative to laboratory analysis. Uses readily available supplies and common test plants. This test will indicate if enough herbicide residue is present to harm sensitive crops.

F797	Slidefilm, 28 fr., with study guide*	$ 7.95
S797	Slide Set, 28 fr., with study guide*	12.70

Pests and Pesticides Series

SLIDEFILMS -- with study guides		
F1108-2.1	Safe Use of Pesticides Around the Home, 37 fr.	$ 10.00
F1108-2.2	Identifying Common Insect Pests, 73 fr.*	18.30
F1108-2.3	Diseases of the Vegetable Garden, 72 fr.*	18.05
SLIDE SETS -- with study guides		
S1108-2.1	Safe Use of Pesticides Around the Home, 37 fr.	$ 16.30
S1108-2.2	Identifying Common Insect Pests, 73 fr.*	30.70
S1108-2.3	Diseases of the Vegetable Garden, 72 fr.*	30.30

Special series price

MF1108-2.1	Pests and Pesticides Series (3 slidefilms)*	$ 32.12
MS1108-2.1	Pests and Pesticides Series (3 slide sets)*	51.40

Transparencies, Study Guides, Cassette Tapes

Safe Use of Pesticides

Pesticide types, formulations, classification, labels, and warnings are described in detail. Protective clothing and equipment and safe practices are illustrated.

T790	Transparency Set, 40 fr., with study guide*	$ 19.80

*Cassette Tapes of study guides are available at an additional cost of $3.85.

SOILS

Subject-Matter Units, Test Questions, Teacher's Keys

U4001a	Collecting and Preparing Soil Samples for Testing, 16p	$ 1.05
U4002a	pH Test for Soil Acidity, 8p	.50
U4003c	Phosphorus Management, 16p	1.05
U4004b	Determining Available Potassium in Soils, 12p	.80
U4005	Nature of Soil Acidity and Major Plant Nutrients, 4p	.25
U4006a	Soil Liming--A Key to Better Farming, 8p	.50
U4008b	Potassium Management, 12p	.80
U4009b	Planning the Nitrogen Program, 16p	1.05
U4010a	Planning a Fertilizer Program, 8p	.50
U4011a	Hunger Signs in Crops (with color insert), 12p	1.10
U4021a	Grassed Waterways, 24p	1.55
U4028	Soil Structure, 8p	.50
U4029	Soil Color, 8p	.50
U4030	Soil Texture, 8p	.50
U4050	Nitrates in Water Supplies, Field Crops, & Ruminant Nutrition, 12p	.80
U4052a	Understanding Soils, 20p	1.30
U4053a	Using the Illinois Land-Use Scorecard, 28p	1.80
U4054b	Using the Universal Soil Loss Equation to Estimate Soil Loss, 20p	1.30
U4058	Using Conservation Tillage Systems, 16p	1.05
Q4058	Test Questions, pkg. of 10	1.50
K4058	Teacher's Key for Q4058	.55
U4060	Soil Erosion--The Silent Enemy of Soil--Our Precious Resource, 36p	2.35

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

When collecting samples with a sampling tube, force the sampling tube into the soil to the plowing depth.

Collecting and Preparing Soil Samples for Testing

Since soil testing is so important to making the best decisions for proper application of fertilizers, this film is basic to introducing soil management principles.

F703a	Slidefilm, 36 fr.	$ 8.30
S703a	Slide Set, 36 fr.	14.40

Soil Color

Compares and contrasts soil colors and relates differences to soil origins and management practices.

F708	Slidefilm, 47 fr.	$ 10.80

Soil Erosion Series

This set of 3 films describes various aspects of soil erosion and how they affect farmland and water quality.

SLIDEFILMS -- with study guides		
F722	Agriculture: Soil Erosion and Water Quality, 82 fr.*	$ 20.35
F723a	Soil Erosion--The Silent Enemy of the Soil--Our Precious Resource, 44 fr.*	11.60
MF724	Meet the Speck: The Erosion Crisis, 67 fr. & Cassette Tape	20.75
SLIDE SETS -- with study guides		
S722	Agriculture: Soil Erosion and Water Quality, 82 fr.*	$ 34.30
S723a	Soil Erosion--The Silent Enemy of the Soil--Our Precious Resource, 44 fr.*	19.10
MS724	Meet the Speck: The Erosion Crisis, 67 fr. & Cassette Tape	32.15

Special series price

MF722	Soil Erosion Series (3 slidefilms)*	36.95
MS722	Soil Erosion Series (3 slide sets)*	57.30

Additional study guides are available at a cost of $1.50 each.

Land and Water Series

This series (cooperatively developed by several agencies) deals with soil-erosion loss, soil conservation, and promoting specific soil conservation practices.

SLIDEFILMS -- with study guides		
F725-1	From Dust Bowl to Mud Bowl--The Erosion Problem, 82fr.*	$ 20.35
F725-2	T by 2000--State Erosion-Control Goals, 72 fr.*	18.05
F725-3	Raindrops and Bombs--The Erosion Process, 77 fr.*	19.20
F725-4	How to Measure What's Missing--The Universal Soil Loss Equation, 79 fr.*	19.65
F725-5	A Plan for the Land--Erosion Control Alternatives, 82 fr.*	20.35
F725-6	Declaring War on Weeds and Erosion--Weed Control for Conservation Tillage, 81 fr.*	20.15
F725-7	Returning to Grass Roots--Hay and Pasture Establishment, 81 fr.*	20.15
SLIDE SETS -- with study guides		
S725-1	From Dust Bowl to Mud Bowl--The Erosion Problem, 82 fr.*	$ 34.30
S725-2	T by 2000--State Erosion-Control Goals, 72 fr.*	30.30
S725-3	Raindrops and Bombs--The Erosion Process, 77 fr.*	32.30
S725-4	How to Measure What's Missing--The Universal Soil Loss Equation, 79 fr.*	33.10
S725-5	A Plan for the Land--Erosion Control Alternatives, 82 fr.*	34.30
S725-6	Declaring War on Weeds and Erosion--Weed Control for Conservation Tillage, 81 fr.*	33.90
S725-7	Returning to Grass Roots--Hay and Pasture Establishment, 81 fr.*	33.90

Special series price

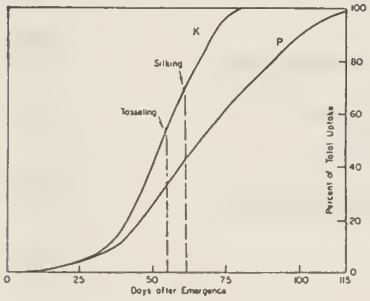
MF725-1	Land and Water Series (7 slidefilms)*	96.20
MS725-1	Land and Water Series (7 slide sets)*	154.65

Conservation Systems Workshop Material

These materials will help teach the fundamentals of conservation planning. Users will learn how to use aerial photos and soils maps to identify highly erodible fields. They also will learn how to estimate water and wind erosion, identify resource problems, and select economical solutions. Includes information on leaving enough residue to reduce soil erosion and comply with state and federal erosion guidelines.

SLIDEFILMS -- each includes study guide and cassette tape		
F726-1	Conservation Planning: A Tool for Better Resource Management, 80 fr.	$ 17.35
F726-2	The Water Erosion Process, 80 fr.	17.35
F726-3	Controlling Water Erosion with Conservation Planning, 80 fr.	17.35
F726-4	The Wind Erosion Process, 80 fr.	17.35
F726-5	Controlling Wind Erosion with Conservation Planning, 80 fr.	17.35
F726-6	Managing Residue to Reduce Erosion, 77 fr.	17.35
SLIDE SETS -- each includes study guide and cassette tape		
S726-1	Conservation Planning: A Tool for Better Resource Management, 80 fr.	$ 27.65
S726-2	The Water Erosion Process, 80 fr.	27.65
S726-3	Controlling Water Erosion with Conservation Planning, 80 fr.	27.65
S726-4	The Wind Erosion Process, 80 fr.	27.65
S726-5	Controlling Wind Erosion with Conservation Planning, 80 fr.	27.65
S726-6	Managing Residue to Reduce Erosion, 77 fr.	

PHOSPHORUS AND POTASSIUM UPTAKE BY CORN



Transparencies, Study Guides, Cassette Tapes

Soil Testing and Fertility

Shows equipment, procedures, and test results of soil testing. Explains how nutrients are held in soils and how soil environmental conditions affect added nutrients. Charts point out the benefits of nutrient application.

T702	Transparency Set, 57 fr., with study guide*	$ 27.45

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Soil Science

Introduces the science of classifying and managing soils. Graphically illustrates soil particle size, textural classes, and common types of soil structure.

T701	Transparency Set, 32 fr.	$ 14.70

SOYBEANS

Subject-Matter Units

U4033b	Soybean Production, 20p	$ 1.30
U4057	Common Problems of Soybeans, 20p	1.30

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Soybean Problems Series

Illustrates many of the insects, diseases, and other problems that interfere with the normal growth and development of the soybean plant.

SLIDEFILMS – with study guides		
F751	Planting to Emergence, 42 fr.*	$ 11.15
F752	Emergence to Flowering, 64 fr.*	16.20
F753	Flowering to Maturity, 54 fr.*	13.90
SLIDE SETS – with study guides		
S751	Planting to Emergence, 42 fr.*	$ 18.30
S752	Emergence to Flowering, 64 fr.*	27.10
S753	Flowering to Maturity, 54 fr.*	23.10
Special series price		
MF751	Soybean Problems Series (3 slidefilms)*	28.65
MS751	Soybean Problems Series (3 slide sets)*	45.55

Growing Soybeans Series

A useful series on soybean management that describes high-yield narrow row planting, controlling soybean diseases, and recognizing herbicide injuries.

SLIDEFILMS		
F755	Growing Soybeans in Narrow Rows, 28 fr., with study guide	$ 7.95
F756	Soybean Disease Management, 37 fr., with study guide	10.00
F798-2	Recognizing Soybean Herbicide Injury, 57 fr.	13.10
SLIDE SETS		
S755	Growing Soybeans in Narrow Rows, 28 fr., with study guide	$ 12.70
S756	Soybean Disease Management, 37 fr., with study guide	16.30
S798-2	Recognizing Soybean Herbicide Injury, 57 fr.	22.80
Special series price		
MF755	Growing Soybeans Series (3 slidefilms)	21.50
MS755	Growing Soybeans Series (3 slide sets)	34.45

Transparencies, Study Guide, Cassette Tape

Soybeans--Planting to Harvest

An excellent set for illustrating various phases in the life of a soybean. Line drawings clearly show seeds, germination, and plant parts. Equipment used in soybean culture is illustrated, as are insects and charts regarding various cultural practices.

T740	Transparency Set, 50 fr., with study guide*	$ 24.30

Additional study guides are available at a cost of $1.50 each.

WEEDS

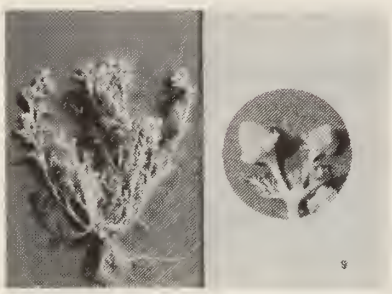
Subject-Matter Units, Test Questions, Teacher's Keys

U4020	Plants Poisonous to Livestock, 16p	$ 1.05
U4042a	Controlling Weeds, 16p	1.05
Q4042a	Test Question, pkg. of 10	1.50
K4042a	Teacher's Key for Q4042a	.55

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Weed Identification Series

Illustrates vegetative and floral characteristics used to identify weeds. Seeds, seedlings, and mature plants of broadleaf and grassy weeds are shown. Practice sets have no identifying labels, so they can be used for review and testing.



SLIDEFILMS		
F791b	Weed Identification, 117 fr.	$ 26.90
F791b(Supp)	Practice Set for F791b, 61 fr.	14.05
F793	Identification of Weed Seeds, 68 fr.	15.65
F793(Supp)	Practice Set for F793, 70 fr.	16.10
F800	Identification of Weed Seedlings, Broadleaves, Pt. I, 45 fr.	10.35
F801	Identification of Weed Seedlings, Broadleaves, Pt. II, 45 fr.	10.35
F802-1	Weed Seedlings and Vegetative Identification--Grass Weeds, 42 fr., with study guide*	11.15
F802-2	Weed Seedlings and Vegetative Identification--Broadleaf Weeds, 102 fr., with study guide*	24.95
F803	Identification of Weed Seedlings, Grasses, 42 fr.	9.65
F811	The Wicked World of Weeds, 77 fr.	17.70
SLIDE SETS		
S791b	Weed Identification, 117 fr.	$ 46.80
S791b(Supp)	Practice Set for S791b, 61 fr.	24.40
X791b	Weed Slide Update, 8 fr.	6.00
S793	Identification of Weed Seeds, 68 fr.	27.20
S793(Supp)	Practice Set for S793, 70 fr.	28.00
S800	Identification of Weed Seedlings, Broadleaves, Pt. I & Pt. II, 83 fr.	33.20
S802-1	Weed Seedlings and Vegetative Identification--Grass Weeds, 57 fr.	22.80
S802-2	Weed Seedlings and Vegetative Identification--Broadleaf Weeds, 146 fr.	58.40
S803	Identification of Weed Seedlings, Grasses, 42 fr.	16.80
S811	The Wicked World of Weeds, 77 fr.	30.80

Special series price

MF791b	Weed Identification Series (10 slidefilms)	108.15
MS791b	Weed Identification Series (9 slide sets)	190.35

Transparencies

How Herbicides Work

Shows how weeds reduce crop yields and why good control is important. Illustrates life cycles of annuals, biennials, and perennials. Describes different kinds of herbicides and how they work. Briefly reviews application equipment and its use.

T700	Transparency Set, 47 fr.	$ 21.00

MISCELLANEOUS

Subject-Matter Unit

U4086	Introduction to Plant Biotechnology, 28p	$ 1.80

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Seed Quality--A Major Factor in Crop Yields

F796	Slidefilm, 39 fr.	$ 8.95

Crop Disease Series

Illustrates the diseases which can affect crops and reduce yields. Also shows some noninfectious disorders. Promotes recognition of disease as the first step of proper control.

SLIDEFILMS -- with study guides		
F773	Disease of Wheat, 50 fr.*	$ 13.00
F747a	Diseases of Soybeans, 45 fr.*	11.85
F749	Diseases of Alfalfa, 42 fr.*	11.15
F750	Diseases of Clovers, 40 fr.*	10.70
F754	The Soybean Cyst Nematode Problem, 55 fr.*	14.15
SLIDE SETS -- with study guides		
S773	Diseases of Wheat, 50 fr.*	$ 21.50
S747a	Diseases of Soybeans, 45 fr.*	19.50
S749	Diseases of Alfalfa, 42 fr.*	18.30
S750	Diseases of Clovers, 40 fr.*	17.50
S754	The Soybean Cyst Nematode Problems, 55 fr.*	23.50

Special series price

MF773	Crop Disease Series (5 slidefilms)*	42.25
MS773	Crop Disease Series (5 slide sets)*	66.75

Approved Practices

A730a	Approved Practices of Corn	$ .50
A740a	Approved Practices of Soybeans	.50
A750	Approved Practices of Alfalfa	.50
A770a	Approved Practices of Wheat	.50
A780	Approved Practices of Oats	.50

Soil Judging and Testing Materials

J700	Land-Use Scorecards (Prod.-Ag) 100 pt., pkg. of 25	$ 1.50
J701	Land-Use Scorecards (non-Ag. Use) 116 pt., pkg. of 25	1.50
J702	Tables for Soil Judging Scorecards, pkg. of 10	1.00

Agronomy Diseases and Pests Picture Sheets

X798.01	Stored Grain Insects and Molds	$ .30
X798.30	Corn Insects--Above Ground	.30
X798.31	Corn Insects--Below Ground	.30
X798.40	Soybean Insects	.30
X799.30	Corn Diseases I	.30
X799.31	Corn Diseases II	.30
X799.32	Corn Diseases III	.30
X799.33	Corn Diseases IV	.30
X799.34	Corn Diseases V	.30
X799.35	Sorghum Diseases I	.30
X799.36	Sorghum Diseases II	.30
X799.40	Soybean Diseases I	.30
X799.41	Soybean Diseases II	.30
X799.50	Alfalfa Diseases I	.30
X799.51	Alfalfa Diseases II	.30
X799.60	Clover I (*diseases*)	.30
X799.61	Clover II (*diseases*)	.30
X799.62	Forage Grass Diseases I	.30

Additional study guides are available at a cost of $1.50 each.

X799.70	Wheat I (*diseases*)	.30
X799.71	Wheat II (*diseases*)	.30
X799.80	Oats (*diseases*)	.30
X799.81	Barley and Rye (*diseases*)	.30
X898.01	Field Crop Weeds	.30
X899.01	Corn I (*herbicide injury*)	.30
X899.02	Corn II (*herbicide injury*)	.30
X899.06	Soybeans I (*herbicide injury*)	.30
X899.07	Soybeans II (*herbicide injury*)	.30
X899.16	Injury Symptoms from Selected Herbicides	.30
X899.17	Herbicide Injury--Meristematic Inhibitors I	.30
X899.18	Herbicide Injury--Meristematic Inhibitors II	.30
X899.19	Herbicide Injury--Plant Growth Regulators & Pigment Inhibitors	.30
X899.20	Herbicide Injury--Photosynthetic Inhibitors & Contact Herbicides	.30

Booklets, Notebooks, Manuals, Pocketbooks

Plant Diseases: Field Crop Plants

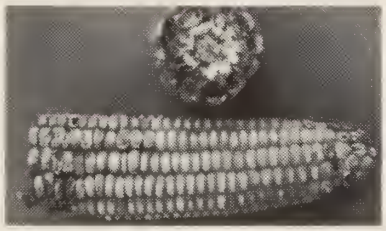
An 8 1/2" x 11" spiral bound booklet with 26 photo identification sheets, each of which has one side filled with up to 25 detailed color photos and the other side with descriptions of the illustrated disorders. Major categories of disorders include diseases, herbicide injuries, and insect pests. A useful reference for agronomists.

MX799.91	Spiral bound booklet	$ 11.25

Diseases and Pests Notebook

A 3-ring notebook organized with tab dividers for storing diseases and pests color photo sheets. There is additional room for other information in each section. Major divisions of the notebook include diseases, herbicide injury, pests, and weeds of agronomic and horticultural crops.

X800	Notebook, with tabbed dividers	$ 12.00



Diseases of Soybeans and Corn

This 3" x 5 1/2" booklet (spiral bound) is a guide to help identify diseases of soybeans and corn quickly and accurately. It assists in early, in-the-field identification when control measures are generally more effective. Over 50 different diseases are illustrated with color photos.

X830	Spiral bound pocketbook	$ 6.00

Broadleaf and Grass and Grasslike Weed Vegetative Identification Keys

These keys describe 27 broadleaf and 20 grass or grasslike weed seedlings found in corn and soybeans. They focus primarily on characteristics of leaf arrangements, true leaves, grass ligules, and cotyledons. Sketches are used in the key to determine proper identification.

Z840.1	Two keys, 8p	$ 1.00

Weed Plants
Crop Plants

Each 8 1/2" x 11" booklet has 40 sheets with clear color photographs that help identify plants quickly and accurately. Each weed or crop plant is shown in 4 stages--seed, seedling, mature plant, and flower.

X850	Weed Plants booklet, 82p	$ 15.00
X860	Crop Plants booklet, 82p	15.00

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Insect Pest Identification of Corn, Soybeans, and Alfalfa

A handy 3" x 5" pocket booklet with 25 color photographs of insect pests. Describes damage, scouting procedures, and guidelines for control.

X870	Spiral bound pocketbook, 52p	$ 4.50

Field Crop Scouting Manual

This 232-page spiral bound manual is designed to aid in identification and evaluation of common pest problems in the field. It describes nutrient deficiencies, herbicide injury, insects, diseases, and other agronomic crop problems. It includes 32 color sheets, and broadleaf and grass keys. Revised 1990.

X880a	Spiral bound book, 232p (*No Illinois discount*)	$ 20.00

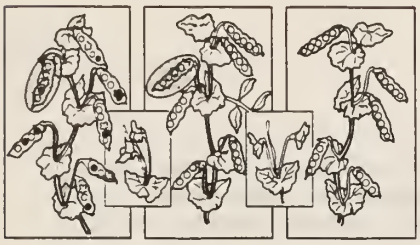
Crop Science: A Laboratory Manual

Provides a well-balanced blend of fundamental principles of plant science and practical material relating to field crop production. Each chapter includes learning objectives, text, and laboratory exercises. Hands-on exercises develop the skills and confidence essential to preparing students for careers in the agronomic sciences. Written for the introductory level college class. An excellent resource for high school agriculture instructors.

X890	Spiral bound book, 296p (*No Illinois discount*)	$ 20.00

AGRICULTURAL SCIENCE

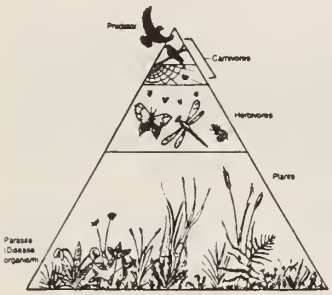
Activity Units



Plant Genetics Series

This three-part Ag/Science activity series lays the groundwork for understanding plant genetics. *Plant Genetics I* discusses the primitive beginnings of plant selection, breeding, and hybridization to increase populations of plants with desired characteristics. *Plant Genetics II* takes a close look at the structures and basic types of reproduction, sexual and asexual, and the processes involved in pollination of plants to improve their characteristics and quality, as well as to develop new varieties. *Plant Genetics III* covers the simple Mendelian laws of inheritance and the influence of meiosis and fertilization techniques on inheritance. In activities self- and cross-pollination and single-trait crosses are investigated.

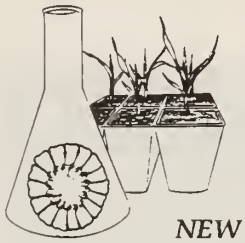
	AU8001	Plant Genetics I: Crop Origins and Plant Improvement, 20p	$ 1.30
	AU8002	Plant Genetics II: Plant Life Cycles and Breeding, 32p	2.10
NEW	**AU8003**	**Plant Genetics III: Plant Reproduction and Heredity, 36p**	**2.35**



Integrated Pest Management Series

Integrated pest management is the ecological approach to pest control. It is a developing technology that seeks to counteract harmful or excessive use of pesticides. *IPM I, Ecology, Crops, and Pests* introduces students to management techniques that may be combined to keep insect and other pest populations at acceptable levels without harm to the environment. *IPM II, Why IPM?* demonstrates in three activities that indiscriminate pesticide use leads to serious problems: pollution of our waters, destruction of beneficial organisms, and renewed outbreaks of pests due to pest resistance or destruction of natural enemies of pests. Practicers of IPM can avoid these problems, obtain good crop yields, and reduce costs associated with pesticide application.

NEW	**AU8004**	**Integrated Pest Management I, Ecology, Crops, Pests, 36p**	**$ 2.35**
NEW	**AU8005**	**Integrated Pest Management II, Why IPM?, 36p**	**2.35**



Crop Breeding Series

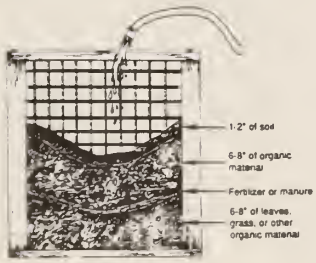
This series of plant breeding publications is designed to describe the importance of the crop under consideration, its breeding history, taxonomic relationships, crop characteristics, breeding objectives, and a glossary. Each unit shows the steps in making a controlled cross for the crop.

NEW	**AU8010**	**Crop Breeding: Tomato, 24p**	**$ 1.55**
NEW	**AU8011**	**Crop Breeding: Corn, 28p**	**1.80**

NEW	**AU8030**	**Plant Tissue Culture: Sterile Technique, 20p**	**$ 1.30**

This activity unit describes the general procedures for plant tissue culture and features information about contaminants and their control. There is a section that lists library and audiovisual resources and tissue culture suppliers. Two activities are included; the first is an introductory exercise and the second is about aseptic culture of apple embryos.

NEW	**AU8031**	**Managing Landscape Waste, 28p**	**$ 1.80**



Dwindling landfill space is dictating new management strategies for landscape waste. Homeowners can cut grass at proper intervals and not collect the clippings or compost grass and leaves. Branches can be chipped for mulch. This activity unit explains the scientific aspects of decomposition and outlines strategies for recycling landscape wastes. Includes plans for a 3-bin composting center and an in-class activity that demonstrates best composting techniques.

*Cassette Tapes of study guides are available at an additional cost of $3.85.

CAREERS

Slidefilms, Slide Sets, Study Guides, Cassette Tapes

Careers in Agriculture

The need for trained people to work in agriculture is outlined in this slidefilm/slide set. Workers representing a variety of agricultural jobs explain what they do at work and comment on the outlook and training needed for those jobs. Each slidefilm or slide set is packaged with a study guide and a cassette recording of that study guide.

MF1008	Slidefilm, 144 fr., with study guide & cassette	$ 33.70
MS1008	Slide Set, 144 fr., with study guide & cassette	52.75

FFA, SOEP, RECORD BOOKS

Subject-Matter Units, Test Questions, Teacher's Keys

U7001	The History of the Illinois FFA, 12p	$ .80
Q7001	Test Questions, pkg. of 10	1.50
K7001	Teacher's Key for Q7001	.55
U7003	SOE Programs in Agriculture, 24p	1.55

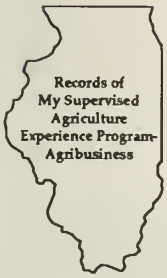
Slidefilm, Slide Set

F1112	Exploring Supervised Occupational Experience Programs (SOEP), 46 fr.	$ 10.60
S1112	Exploring Supervised Occupational Experience Programs (SOEP), 46 fr.	18.40

Transparencies

T1007	FFA Facts, 16 fr.	$ 7.50

NEW ——— **New SAE Record Book for Agribusiness (yellow)**



R300	Records of My Supervised Experience Program--Agribusiness, 48p	$ 3.00
	Extra Pages	
R300.DE	Training Agreement/Training Plan, Pad/20	1.50
R300.E	Set of 8 extra pages	.65
R300.L	Receipts, pad/20	1.50
R300.M	Expenses, pad/20	1.50
	Problem and Key	
Q300	Fruit/Vegetable Production Practice Problem, 12p	.70
K300	Teacher's Key for Q300, 16p	1.25
Z1007	1-inch Notebook for Agribusiness Record Book (R300)	4.10

Record Books for FFA Foundation Awards (Sophomore, Junior, & Senior classes)

R401	Agricultural Electrification	$ .85
R402	Agricultural Mechanics	.85
R403	Safety	.85
R501	Fish and Wildlife	.85
R502	Forestry	.85
R601	Floriculture	.85
R602	Fruit or Vegetable Production	.85
R603	Home and Farmstead Beautification	.85
R604	My Plant Diary	.30
R605	Nursery Operations	.85
R606	Turf and Landscape Management	.85
R701	Soil and Water Management	.85
R1001	Outdoor Recreation	.85
R1002	Product Processing	.85

Additional study guides are available at a cost of $1.50 each.

NEW

Production Record Books – 1990 Version

	Basic Book Sections	
R901.1	Records of My Supervised Experience Program– basic book and covers (white pages)	$ 1.65
R901.2	Livestock Enterprise (yellow pages)	1.00
R901.3	Crop Enterprise (green pages)	.50
	Extra Pages	
R901.4	Feed Records for Livestock, pad/20	$ 1.50
R901.5	Notes and Observations Sheets for Livestock, pad/20	1.50
R901.6	Notes and Observations Sheets for Crops, pad/20	1.50
Q358	Practice Problem for use with the Record Book R901.1	.85
K358	Key to Practice Problem Q358	1.10

Limited supply will not reprint

Production Record Book (green book from Interstate)

IN2206	Packs of the Basic Books, Records of My Supervised Experience Program (20 books)	$ 15.65
IN2189	Packs of Breeding, Birth and Weaning Record (20 sheets)	2.50
IN6230	Packs of extra Feed Record Sheets for Livestock Enterprise Units (20 sheets)	2.50
IN2209	Packs of Inventory, Purchases and Sales Sheets (20 sheets)	2.50
IN2190	Packs of Labor Record (20 sheets)	2.50
IN6232	Packs of Notes & Observations for Crop Enterprise Unit (20 sheets)	2.50
IN2212	Packs of Other Expenses (pages 6-7) (20 sheets)	2.50

Supplemental Material for Record Books

Z404	Sales and Service Self-Employment Supplement	$ .30
Q602	Problem for Use with Fruit or Vegetable Production Record Book, 4p	.25
K602	Teacher's Key to Q602, 12p	.80

JUDGING MATERIALS

Judging Manuals

J100a	Judging Beef Cattle	$ 3.85
J120a	Judging and Grading Poultry and Eggs	3.85
J140a	Judging Sheep	3.85
J160a	Judging Swine	3.85
J200	Judging Dairy Cattle	1.10
J250a	Judging & Identifying Dairy Products	3.85
J790	Crop Judging	3.85

NEW

J150a Judging Horses $ 3.85

A completely revised and updated manual designed to assist in beginning horse selection. This manual is fully illustrated and covers such topics as parts of a horse, parts of the hoof, and soundness concerns/problems. Comparisons are provided between an ideal horse and horses that are overweight and underweight. Terms used in oral reasons (conformation and performance) along with a practice class and an official placing are also included.

NEW

J180e Meat Judging and Grading $ 4.25

This new manual contains vital information on beef, pork, and lamb judging, retail cuts, quality and yield grading. This completely revised booklet also contains complete descriptions of the retail meat cuts.

Computing Slide

J1001	Hormel Computing Slide (Price subject to change following notice in Vo-Ag *News & Notes*)	$ 9.90

*Cassette Tapes of study guides are available at an additional cost of $3.85.

Judging Samples

Z7001	Crop Seed Samples (30 crops)	$ 14.50
Z7002	Sample Grain Classes (Corn, soybeans, oats, and wheat; includes placings and reasons)	19.50

NEW ——

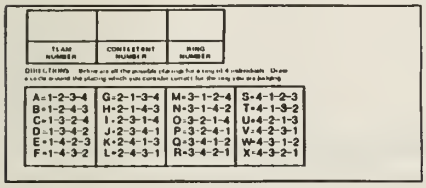
Livestock Judging Videotape Series

This new series of videotapes contains information vital to beef cattle selection and oral reasons presentations. These 1/2-inch VHS tapes were developed by Illinois State University, Normal, IL and are available from Vocational Agriculture Service.

V100	Visual Appraisal of Yearling Beef Heifers, 11:49 min.	$ 35.00
V101	Selection, Attributes, and Faults, 10:55 min.	35.00
V102	Placing and Discussion of Commercial Chianina Heifers, 13:32 min.	35.00
V103	Oral Reasons in Livestock Judging, 12 min.	35.00

Special series price ——

MV100	Livestock Judging Series (V100 through V103)	126.00



TEAM NUMBER	CONTESTANT NUMBER	RING NUMBER

DIRECTIONS: Write on all the possible placings for a ring of 4 individuals. Draw a circle around the placing which you consider correct for the ring you are judging.

A=1-2-3-4	G=2-1-3-4	M=3-1-2-4	S=4-1-2-3
B=1-2-4-3	H=2-1-4-3	N=3-1-4-2	T=4-1-3-2
C=1-3-2-4	I=2-3-1-4	O=3-2-1-4	U=4-2-1-3
D=1-3-4-2	J=2-3-4-1	P=3-2-4-1	V=4-2-3-1
E=1-4-2-3	K=2-4-1-3	Q=3-4-1-2	W=4-3-1-2
F=1-4-3-2	L=2-4-3-1	R=3-4-2-1	X=4-3-2-1

Judging Cards Used in Illinois State Contests

Specify type and color (salmon, green, pink, blue, yellow)

Agribusiness Management--sample contest questions (see Z374, Ag. Economics section)

Agricultural Mechanics--No judging cards used.

	CROPS CONTEST	
J999.100	Regular Placing	$ .05
J999.107	Crop Seed Identification	.05
J999.108	Weed Identification	.05
	DAIRY CONTEST	
J999.100	Regular Placing	.05
J999.101	Production Ring	.05
	DAIRY FOODS CONTEST	
J999.113	Scoring and Criticizing Milk Samples	.05
J999.114	Scoring and Criticizing Milker Unit Heads	.05
J999.115	Identification of Cheeses	.05
J999.117	California Mastitis Test	.05
J999.118	Real Versus Artificial Dairy Foods/Products	.05
	HORSE CONTEST	
J999.100	Regular Placing	.05
	LIVESTOCK CONTEST	
J999.100	Regular Placing	.05
J999.102	Female Selection Class (Keep--Cull)	.05
J999.103	Beef Cattle Grading (Slaughter Cattle)	.05
J999.104	Swine Grading	.05
	MEATS EVALUATION AND MANAGEMENT CONTEST	
J999.100	Regular Placing	.05
J999.105	Beef Carcass Quality Grading	.05
J999.106	Beef Carcass Yield Grading	.05
J181	Meat Identification (pink, yellow, green)	.05
	HORTICULTURE CONTEST	
J999.100	Regular Placing	.05
J690	Horticulture Identification Ring (4 pages)	.20
	POULTRY CONTEST	
J999.100	Regular Placing	.05
J999.109	Dressed Market Bird Grading	.05
J999.110	Egg Grading -- Exterior Quality	.05
J999.111	Egg Grading -- Interior Quality	.05
J999.112	Identification of Chicken Parts	.05

Additional study guides are available at a cost of $1.50 each.

Registration Cards (sets of two)

Registration cards come in sets: one for the team coach and one for officials.

J999.21	Livestock	$ .10
J999.22	Dairy	.10
J999.23	Poultry	.10
J999.24	Crops	.10
J999.25	Meats Evaluation and Management	.10
J999.26	Dairy Foods	.10
J999.27	Horticulture	.10
J999.28	Farm Business Management	.10
J999.29	Agricultural Mechanics	.10
J999.3	Judges Placing Cards	.05
J999.4	Manila Cards for Scoring	.05
J999.5	Summary Sheets (set of 2)	.10

PARLIAMENTARY PROCEDURE

Slidefilm, Slide Set

Introduction to Parliamentary Procedure

This slidefilm/slide set explains why parliamentary procedures were developed and describes the classes of motions. It would make an excellent lead-in to a series of lessons on parliamentary procedure.

F1006	Slidefilm, 49 fr.	$ 11.25
S1006	Slide Set, 49 fr.	19.60

Transparencies

Parliamentary Procedure Transparencies

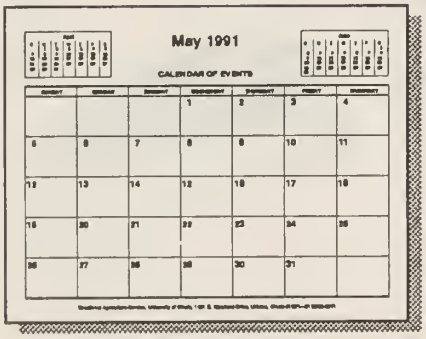
Classes and ranking of motions used in parliamentary procedure are explained in this set of transparencies.

T1006	Transparency Set, 14 fr., with study guide	$ 8.10

Other Parliamentary Procedure Materials

P270	A Guide to Parliamentary Practices	$ 1.55
P271	Beginning Steps in Parliamentary Procedure	.55
P272	The Teacher's Guide to Parliamentary Procedure	.30
Q272	Test Questions for P272	1.00
K272	Teacher's Key for Q272	1.00
P273	Characteristics of Motions, 12p	.80

CALENDAR



Z1001	Calendar of Events, Set of monthly calendars August through July, 8 1/2" x 11", printed on heavy paper with space for writing in events	$ 1.00

*Cassette Tapes of study guides are available at an additional cost of $3.85.

GENERAL ORDER FORM

1991

Vocational Agriculture Service, University of Illinois, 1401 S. Maryland Drive, Urbana, Illinois 61801

Please send to:

Name _____ Date _____

School _____

Address _____ Zip Code _____

Billing Instructions _____

FEI No. _____ OR Social Security No. _____
(For schools and companies) (For individuals)

Quantity Desired	Item Number	Title	Price Each	Amount

Checks should be made payable to the **UNIVERSITY OF ILLINOIS** but sent to Vocational Agriculture Service

If payment is sent with this order, please add the following for postage and handling:

For orders under $25.00 . . . . . add $3.00
For orders from $25.00 to $100.00 . . . . . add 8%
For orders from $100.01 to $500 . . . . . add 7%
For orders over $500 . . . . . add 6%

Total _____

Less 10% (Illinois residents only) _____

Postage & Handling _____

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University of Illinois
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Urbana, Illinois 61801

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Please send to:

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Billing Instructions _____

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Postage & Handling _____

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From: _____

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Urbana, Illinois 61801

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RELEASES PROGRAMS

Agriculture Releases

Agriculture Releases are a series of packets assembled periodically, October through April, containing miscellaneous new or revised agricultural materials. Subscribers to this service automatically receive a copy of each new circular, most new bulletins, various newsletters and releases from departments of the University of Illinois College of Agriculture; proceedings of conferences, seminars, and field days; new printed publications from VAS; and other items of interest. Occasionally materials are obtained from the USDA and other state universities. Many of these items are provided free to VAS Releases subscribers, while others are distributed at cost.

Releases charges are accumulated and billed at the end of the school year. Maximum charge for this service for 1991-92 is $90.00 for Illinois subscribers, and $105.00 for out-of-state subscribers (plus shipping). If the total charge is less than the maximum, the lesser amount (plus shipping) will be billed. Also included with each packet are a reference sheet and a set of 3" x 5" cards indexed according to the categories used in the VAS filing system. (The filing system is sent free to new subscribers.)

Horticulture Releases

Horticulture Releases include current printed materials of interest to Horticulture teachers. Each Releases packet contains recent University of Illinois Extension publications, new and revised Vocational Agriculture Service publications, plus additional relevant information. Free items are often included; most items are sent at cost. Releases packets are issued periodically from October through April.

Releases charges are accumulated and billed at the end of the school year. Maximum charge for this service for 1991-92 is $55.00 for Illinois subscribers, and $65.00 for out-of-state subscribers (plus shipping). If the total charge is less than the maximum, the lesser amount (plus shipping) will be billed.

ADVANCE ORDER PROGRAM

Those who subscribe to the **Advance Order Program** receive an additional 10% discount under the regular price paid for new materials. All new and revised subject-matter units, slidefilms, slide sets, study guides, and transparencies released by Vocational Agriculture Service during the school year are distributed in this program.

Slidefilms/Slide Sets -- Advance Order subscribers will receive a print of each new or revised slidefilm and/or slide set produced during the school year by Vocational Agriculture Service. *Slidefilms and slide sets are identical in content, but different in format.* Slidefilms are single-frame, 35-mm color films for use with a standard filmstrip projector. Slide sets are composed of double-frame, 2" x 2" color slides in plastic mounts. You may subscribe to *either format, or both*, at the prices listed, plus postage.

For Illinois residents, the guaranteed maximum cost for Advance Order slidefilms for 1991-92 is $120.00; for slide sets the guaranteed maximum cost is $200.00. For out-of-state customers the guaranteed limits are $140.00 and $250.00, respectively.

Transparencies -- Advance Order subscribers will receive one set of each new or revised packet of overhead projection transparencies produced during the school year by Vocational Agriculture Service.

Each packet will contain transparencies printed on clear plastic, paper copies, and related text material, all in a manila pocket folder with the title stamped on the tab. Advance orders for transparency sets will be billed at or below the guaranteed maximum costs, plus postage. For Illinois residents, the guaranteed maximum cost for Advance Order transparencies subscribers for 1991-92 is $35.00. For out-of-state customers the guaranteed limit is $45.00.

Subject-Matter Units -- A "set" of subject-matter units is one copy of each new or revised title produced during the school year by Vocational Agriculture Service. Subscribers will receive as many copies of each title as the number of sets ordered on this form. Advance orders for subject-matter units will be billed at or below the guaranteed maximum costs listed, plus postage. The guaranteed maximum cost is $12.00 per set of units.

NOTE:

Advance order materials are shipped throughout the school year as they are released. Charges are accumulated and billed at the end of the school year. Billing is for actual costs, at or below the guaranteed maximum, for each area: slidefilms, slide sets, transparencies, and sets of subject-matter units, (plus shipping). Other billing times may be arranged if requested.

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